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L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS

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L1 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1016001 HCAPLUS

DOCUMENT NUMBER: 142:6314

TITLE: Preparation of hydroxystyryl sulfonyl derivatives for treatment of obesity

INVENTOR(S): Tagmose, Tina Moller; Olesen, Preben Houlberg; Hansen, Thomas Kruse

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004101505	A1	20041125	WO 2004-DK307	20040505
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004138301	A1	20040715	US 2003-699338	20031031 <--
EP 1625112	A1	20060215	EP 2004-731133	20040505
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
US 2006128662	A1	20060615	US 2005-270389	20051109
PRIORITY APPLN. INFO.:			DK 2003-734	A 20030514
			DK 2003-1618	A 20031031
			US 2003-516588P	P 20031031
			DK 2002-1719	A 20021108
			US 2002-425642P	P 20021112
			DK 2003-827	A 20030604
			US 2003-476275P	P 20030605
			WO 2004-DK307	W 20040505

OTHER SOURCE(S): MARPAT 142:6314

ED Entered STN: 25 Nov 2004

AB Title compds. I [wherein R1, R2 = independently H, NO₂, CN, halo,
(halo)alkyl, alkenyl, alkynyl, (hetero)aryl, alkoxy, alkylamino, CO₂R₆,
SO₂OR₆, SOO-2R₆, OCOR₆, NHCO₂R₆, N(COR₆)₂; R₃ = H, NO₂, CN, halo, alkyl,
alkenyl, alkynyl, alkoxy, alkylamino, CO₂R₆, SO₂OR₆, SOO-2R₆, OCOR₆,

NHCOR₆, N(COR₆)₂; R₄ = NO₂, CN, halo(alkyl), COR₆, CO₂R₆, CON(R₆)₂, SO₂R₆, SOO-2R₆, SO₂N(R₆)₂, PO(OR₆)₂, B(OR₆)₃; R₅ = (un)substituted (cyclo)alkyl, alkenyl, alkynyl, (hetero)aryl, heterocycl; or R₄ and R₅ together with the atoms to which they are attached constituted an (un)substituted 5- to 8-membered ring; R₆ = H, (un)substituted alkyl, (hetero)aryl; with provisos; and pharmaceutically acceptable salts, solvates, hydrates, and prodrugs thereof] were prepared for the treatment of obesity. For example, condensation of 3,5-di(tert-butyl)-4-hydroxybenzaldehyde and methanesulfonylacetonitrile using piperidine in EtOH afforded the desired acrylonitrile II (35%). The latter increased glucose utilization in human epithelial FSK-4 cells with EC₅₀ of 1.4 μM. Thus, I and their pharmaceutical compns. are useful for the treatment of obesity and related conditions, such as atherosclerosis, hypertension, type 2 diabetes, dyslipidemia, coronary heart disease, osteoarthritis, gallbladder diseases, and endometrial, breast, prostate, or colon cancer (no data).

- IC ICM C07C317-46
ICS C07D213-70; C07D277-32; C07D295-26; C07D307-28; C07D307-38;
C07D311-16; C07D333-34; A61K031-10; A61P003-04
- CC 25-20 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 63
- ST hydroxystyryl sulfonyl prepn antiobesity
- IT Antiarteriosclerotics
(antiatherosclerotics; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Intestine, neoplasm
(colon; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Artery, disease
(coronary; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Nerve, disease
(diabetic neuropathy; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Kidney, disease
(glomerulus, diabetic microvascular disease; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Respiration, animal
(mitochondrial; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Antidiabetic agents
(non-insulin-dependent diabetes; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Diabetes mellitus
(non-insulin-dependent; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT Antiarthritics
Antihypertensives
Antiobesity agents
Antitumor agents
Atherosclerosis
Cardiovascular agents
Combination chemotherapy
Gallbladder, disease
Human
Mammary gland, neoplasm
Obesity

Osteoarthritis

Prostate gland, neoplasm

Respiration, animal

(preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT Dyslipidemia

Reactive oxygen species

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT Drug delivery systems

(prodrugs; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT Eye, disease

(retinopathy, diabetic microvascular disease; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT Drug delivery systems

(tablets; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT 691887-69-1P, (E)-2-(4-Chlorophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 691887-75-9P, 2-(4-Bromophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797035-87-1P 797036-21-6P 797037-16-2P, (E)-4-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)-1-propen-2-yl]sulfonyl]benzoic acid

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(antiobesity agent; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

IT 147167-95-1P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-methylsulfonyl-2-propenenitrile 170449-05-5P, (E)-2-Phenylsulfonyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 170449-06-6P, (E)-3-[3,5-Di(tert-butyl)-4-hydroxyphenyl]-2-[(pyridin-2-yl)sulfonyl]-2-propenenitrile 186582-17-2P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-fluorophenylsulfonyl)-2-propenenitrile 186582-23-0P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(thien-2-yl)sulfonyl]-2-propenenitrile 211299-44-4P 691887-70-4P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(propan-2-ylsulfonyl)-2-propenenitrile 691887-72-6P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(2,5-dichlorophenylsulfonyl)-2-propenenitrile 691887-73-7P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(2,4-dichlorophenylsulfonyl)-2-propenenitrile 691887-74-8P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(hexylsulfonyl)-2-propenenitrile 797035-83-7P, (E)-2-(4-Chlorophenylsulfonyl)-3-(4-hydroxy-3-nitrophenyl)-2-propenenitrile 797035-84-8P, (E)-3-(4-Hydroxy-3-nitrophenyl)-2-methylsulfonyl-2-propenenitrile 797035-85-9P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(1-methyl-1H-imidazol-2-yl)sulfonyl]-2-propenenitrile 797035-86-0P, 2-(4-Chlorophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)but-2-enenitrile 797035-89-3P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-nitrophenylsulfonyl)-2-propenenitrile 797035-90-6P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(4-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797035-91-7P, (E)-3-(3-tert-Butyl-4-hydroxy-5-nitrophenyl)-2-(4-chlorophenylsulfonyl)-2-propenenitrile 797035-92-8P 797035-93-9P 797035-94-0P 797035-95-1P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-[(4-methylpiperazin-1-yl)carbonyl]phenyl]sulfonyl]-2-propenenitrile 797035-96-2P 797035-97-3P 797035-98-4P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-[(morpholin-4-yl)carbonyl]phenyl]sulfonyl]-2-propenenitrile 797035-99-5P, (E)-2-(4-Aminophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-01-2P,

(E)-2-[[4-Chlorophenyl]methyl]sulfonyl]-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-02-3P 797036-03-4P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-[(3,5-dimethylmorpholin-4-yl)carbonyl]phenyl]sulfonyl]-2-propenenitrile 797036-04-5P,
2-(4-tert-Butylphenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-05-6P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(naphthalen-1-yl)sulfonyl]-2-propenenitrile 797036-06-7P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[[(furan-2-yl)methyl]sulfonyl]-2-propenenitrile 797036-08-9P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-tolylsulfonyl)-2-propenenitrile 797036-09-0P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-isopropylphenylsulfonyl)-2-propenenitrile
797036-10-3P, 2-[[3,5-Di(tert-butyl)-4-hydroxyphenyl]sulfonyl]-3-[3,5-di(tert-butyl)-4-hydroxyphenyl]-2-propenenitrile 797036-12-5P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(4-methylsulfonylphenyl)sulfonyl]-2-propenenitrile 797036-14-7P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(3-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-16-9P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(2-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-18-1P, 2-[(5-Chloropyridin-2-yl)sulfonyl]-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-20-5P
797036-23-8P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[2-[(morpholin-4-yl)carbonyl]phenyl]sulfonyl]-2-propenenitrile 797036-24-9P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[3-[(morpholin-4-yl)carbonyl]phenyl]sulfonyl]-2-propenenitrile 797036-25-0P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-methoxyphenylsulfonyl)-2-propenenitrile 797036-26-1P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(3-methoxyphenylsulfonyl)-2-propenenitrile 797036-28-3P,
3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(3,4-dimethoxyphenyl)sulfonyl]-2-propenenitrile 797036-30-7P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-(2,3-dihydrofuran-2-yl)phenyl]sulfonyl]-2-propenenitrile 797036-31-8P,
3-[4-[[2-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)ethenyl]sulfonyl]phenyl-2-methylacrylic acid methyl ester 797036-32-9P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(4-styrylphenylsulfonyl)-2-propenenitrile
797036-33-0P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-(2-isobutoxyvinyl)phenyl]sulfonyl]-2-propenenitrile 797036-34-1P,
2-[[4-(2-Butoxyvinyl)phenyl]sulfonyl]-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-35-2P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[4-(phenylethynyl)phenyl]sulfonyl]-2-propenenitrile
797036-36-3P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(2-ethoxyethylsulfonyl)-2-propenenitrile 797036-38-5P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[[2-(2-ethoxyethoxy)ethyl]sulfonyl]-2-propenenitrile
797036-40-9P, 2-(4-Chlorophenylsulfonyl)-3-(3,5-di-sec-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-41-0P, (E)-2-(3-Bromophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-42-1P, 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(hex-5-en-1-ylsulfonyl)-2-propenenitrile 797036-44-3P,
(E)-2-(4-Iodophenylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-45-4P, (E)-2-(Cyclopentylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-47-6P,
(E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(nonylsulfonyl)-2-propenenitrile 797036-49-8P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(pentylsulfonyl)-2-propenenitrile 797036-51-2P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(heptylsulfonyl)-2-propenenitrile 797036-53-4P,
(E)-2-(Cyclohexylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-55-6P, (E)-3-[[2-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)ethenyl]sulfonyl]phenylpropionic acid 797036-57-8P,
(E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(4-methyl-2-oxo-2H-chromen-7-yl)sulfonyl]-2-propenenitrile 797036-59-0P, (E)-3-(3,5-Di-tert-butyl-4-

hydroxyphenyl)-2-[(4-trifluoromethoxyphenyl)methyl]sulfonyl]-2-propenenitrile 797036-61-4P, (E)-2-(Cyclohexylmethylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-63-6P, (E)-2-(Butylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-64-7P, (E)-2-(Propylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-65-8P, (E)-2-(Ethylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-66-9P, (E)-2-(Cyclopropylmethylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-68-1P, (E)-2-(Cycloheptylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-70-5P, (E)-2-(Cyclobutylmethylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-73-8P, (E)-2-(Cyclooctylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-75-0P, (E)-3-(3-tert-Butyl-4-hydroxy-5-methylphenyl)-2-[(4-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-76-1P, (E)-3-(3-tert-Butyl-4-hydroxy-5-methylphenyl)-2-[(3-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-77-2P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(5-methylhexyl)sulfonyl]-2-propenenitrile 797036-79-4P, (E)-2-(2-Cyclohexylethylsulfonyl)-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-2-propenenitrile 797036-82-9P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(4-methylpentyl)sulfonyl]-2-propenenitrile 797036-85-2P, (E)-3-(3-tert-Butyl-4-hydroxy-5-methylphenyl)-2-(hexylsulfonyl)-2-propenenitrile 797036-88-5P, (E)-3-(4-Hydroxy-3,5-diisopropylphenyl)-2-[(4-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-90-9P, (E)-3-(4-Hydroxy-3,5-diisopropylphenyl)-2-[(3-trifluoromethoxyphenyl)sulfonyl]-2-propenenitrile 797036-92-1P, (E)-2-(4-Chlorophenylsulfonyl)-3-(4-hydroxy-3,5-dimethylphenyl)-2-propenenitrile 797036-94-3P, (E)-2-(4-Chlorophenylsulfonyl)-3-(4-hydroxy-3,5-dibromophenyl)-2-propenenitrile 797036-95-4P, (E)-2-(4-Chlorophenylsulfonyl)-3-(4-hydroxy-3,5-dimethoxyphenyl)-2-propenenitrile 797036-97-6P, (E)-2-(4-Chlorophenylsulfonyl)-3-(4-hydroxy-3-iodo-5-methoxyphenyl)-2-propenenitrile 797036-98-7P, (E)-2-(Hexylsulfonyl)-3-(4-hydroxy-3,5-diisopropylphenyl)-2-propenenitrile 797037-00-4P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(2-(2-methoxyethoxy)ethyl)sulfonyl]-2-propenenitrile 797037-04-8P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(2-methoxyethylsulfonyl)-2-propenenitrile 797037-08-2P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-(pent-4-en-1-ylsulfonyl)-2-propenenitrile 797037-11-7P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(azepan-1-yl)sulfonyl]-2-propenenitrile 797037-13-9P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(piperidin-1-yl)sulfonyl]-2-propenenitrile 797037-14-0P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(pyrrolidin-1-yl)sulfonyl]-2-propenenitrile 797037-15-1P, (E)-3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-2-[(morpholin-4-yl)sulfonyl]-2-propenenitrile 797037-17-3P, (E)-4-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)prop-1-en-2-yl]sulfonyl]-N,N-bis(2-methoxyethyl)benzamide 797037-18-4P, (E)-4-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)prop-1-en-2-yl]sulfonyl]-N,N-dimethylbenzamide 797037-19-5P 797037-20-8P, (E)-4-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)prop-1-en-2-yl]sulfonyl]-N-(2-hydroxyethyl)benzamide 797037-21-9P, 4-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)prop-1-en-2-yl]sulfonyl]-N,N-bis(2-hydroxyethyl)benzamide 797037-22-0P, 3-[[3-Cyano-1-(3,5-di-tert-butyl-4-hydroxyphenyl)prop-1-en-2-yl]sulfonyl]benzoic acid 797037-23-1P 797760-80-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(antiobesity agent; preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

- IT 50-99-7, Glucose, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)
- IT 80-62-6, Methyl methacrylate 100-42-5, Styrene, reactions 109-01-3,
 N-Methylpiperazine 109-53-5, Isobutyl vinyl ether 110-91-8,
 Morpholine, reactions 110-97-4, Diisopropanolamine 111-34-2, Butyl
 vinyl ether 111-42-2, Diethanolamine, reactions 111-95-5 123-57-9,
 3,5-Dimethylmorpholine 134-96-3, 3,5-Dimethoxy-4-hydroxybenzaldehyde
 141-91-3, 2,6-Dimethylmorpholine 536-74-3, Phenylacetylene 885-58-5,
 3-tert-Butyl-5-nitro-4-hydroxybenzaldehyde 1191-99-7, 2,3-Dihydrofuran
 1620-98-0, 3,5-Di-tert-butyl-4-hydroxybenzaldehyde 1851-09-8,
 (4-Chlorophenylsulfonyl)acetonitrile 2233-18-3, 3,5-Dimethyl-4-
 hydroxybenzaldehyde 2274-42-2, (Methylsulfonyl)acetonitrile 2973-77-5,
 3,5-Dibromo-4-hydroxybenzaldehyde 5438-36-8, 3-Iodo-5-methoxy-4-
 hydroxybenzaldehyde 5697-44-9, (4-Methylphenylsulfonyl)acetonitrile
 7605-28-9, (Phenylsulfonyl)acetonitrile 10537-52-7, 3,5-Di-sec-butyl-4-
 hydroxybenzaldehyde 10537-77-6, 3-tert-Butyl-4-hydroxy-5-
 methylbenzaldehyde 10537-86-7, 3,5-Diisopropyl-4-hydroxybenzaldehyde
 13654-62-1, (Ethylsulfonyl)acetonitrile 14035-33-7 25790-24-3,
 (4-Nitrophenylsulfonyl)acetonitrile 32083-66-2, (4-
 Fluorophenylsulfonyl)acetonitrile 37463-94-8, Sulfonyldiacetonitrile
 64445-04-1, (4-tert-Butylphenylsulfonyl)acetonitrile 98548-92-6,
 (Butylsulfonyl)acetonitrile 120069-21-8, Propan-2-ylsulfonylacetonitrile
 126891-45-0, (4-Bromophenylsulfonyl)acetonitrile 132276-87-0,
 (4-Methoxyphenylsulfonyl)acetonitrile 132276-89-2, (4-
 Iodophenylsulfonyl)acetonitrile 132276-90-5, (Naphthalen-1-
 ylsulfonyl)acetonitrile 170449-34-0, (Pyridin-2-ylsulfonyl)acetonitrile
 175137-57-2, (4-Chlorobenzylsulfonyl)acetonitrile 175137-61-8,
 (Propylsulfonyl)acetonitrile 175137-62-9, (Thien-2-
 ylsulfonyl)acetonitrile 175137-63-0, (1-Methylimidazol-2-
 ylsulfonyl)acetonitrile 175202-36-5, [(2-Furylmethyl)sulfonyl]acetonitrile
 203310-42-3, Hexylsulfonylacetonitrile 207853-59-6,
 (4-Isopropylphenylsulfonyl)acetonitrile 217186-16-8,
 [(4-Trifluoromethoxyphenyl)sulfonyl]acetonitrile 243984-87-4,
 (2-Carboxyphenylsulfonyl)acetonitrile 691887-83-9, (2,5-
 Dichlorophenylsulfonyl)acetonitrile 691887-84-0, (3-
 Bromophenylsulfonyl)acetonitrile 797035-88-2, (4-
 Carboxyphenylsulfonyl)acetonitrile 797036-00-1, (4-
 Aminophenylsulfonyl)acetonitrile 797036-07-8, (3,5-
 Dichlorophenylsulfonyl)acetonitrile 797036-11-4, [[3,5-Di(tert-butyl)-4-
 hydroxyphenyl]sulfonyl]acetonitrile 797036-13-6, [(4-
 Methylsulfonylphenyl)sulfonyl]acetonitrile 797036-15-8,
 [(3-Trifluoromethoxyphenyl)sulfonyl]acetonitrile 797036-17-0,
 [(2-Trifluoromethoxyphenyl)sulfonyl]acetonitrile 797036-19-2,
 [(5-Chloropyridin-2-yl)sulfonyl]acetonitrile 797036-22-7,
 (3-Carboxyphenylsulfonyl)acetonitrile 797036-27-2, (3-
 Methoxyphenylsulfonyl)acetonitrile 797036-29-4, [(3,4-
 Dimethoxyphenyl)sulfonyl]acetonitrile 797036-37-4, [(2-
 Ethoxyethyl)sulfonyl]acetonitrile 797036-39-6, [[2-(2-
 Ethoxyethoxy)ethyl]sulfonyl]acetonitrile 797036-43-2,
 (Hex-5-enylsulfonyl)acetonitrile 797036-46-5,
 (Cyclopentylsulfonyl)acetonitrile 797036-48-7, Nonylsulfonylacetonitrile
 797036-50-1, Pentylsulfonylacetonitrile 797036-52-3,
 Heptylsulfonylacetonitrile 797036-54-5, (Cyclohexylsulfonyl)acetonitrile

797036-56-7, 3-(4-Cyanomethylsulfonylphenyl)propionic acid 797036-58-9,
 [(4-Methyl-2-oxo-2H-chromen-7-yl)sulfonyl]acetonitrile 797036-60-3,
 [[(4-Trifluoromethoxyphenyl)methylsulfonyl]acetonitrile 797036-62-5,
 [(Cyclohexylmethyl)sulfonyl]acetonitrile 797036-67-0,
 (Cyclopropylmethylsulfonyl)acetonitrile 797036-69-2,
 (Cycloheptylsulfonyl)acetonitrile 797036-71-6,
 (Cyclobutylmethylsulfonyl)acetonitrile 797036-72-7 797036-74-9,
 (Cyclooctylsulfonyl)acetonitrile 797036-78-3, [(5-Methylhexyl)sulfonyl]acetonitrile 797036-81-8, [(2-Cyclohexylethylsulfonyl)acetonitrile 797036-84-1, [(4-Methylpentyl)sulfonyl]acetonitrile 797037-02-6, [[2-(2-Methoxyethoxy)ethylsulfonyl]acetonitrile 797037-06-0, (2-Methoxyethylsulfonyl)acetonitrile 797037-10-6, (Pent-4-en-1-ylsulfonyl)acetonitrile 797037-12-8, [(Azepan-1-yl)sulfonyl]acetonitrile
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of hydroxystyryl sulfonyl derivs. for treatment of obesity)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 2 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:412795 HCPLUS
 DOCUMENT NUMBER: 140:423475
 TITLE: Preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity
 INVENTOR(S): Hansen, Birgit Sehested; Tullin, Soren; Hansen, Thomas Kruse; Colding-Jorgensen, Morten
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: PCT Int. Appl., 133 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041256	A2	20040521	WO 2003-DK742	20031031
WO 2004041256	A3	20040902		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003275939	A1	20040607	AU 2003-275939	20031031
US 2004138301	A1	20040715	US 2003-699338	20031031 <-
EP 1575575	A2	20050921	EP 2003-810374	20031031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006514101	T2	20060427	JP 2005-502095	20031031
PRIORITY APPLN. INFO.:			DK 2002-1719	A 20021108
			DK 2003-734	A 20030514
			DK 2003-827	A 20030604

US 2002-425642P	P 20021112
US 2003-476275P	P 20030605
WO 2003-DK742	W 20031031

OTHER SOURCE(S) : CASREACT 140:423475; MARPAT 140:423475

ED Entered STN: 21 May 2004

AB This invention relates to chemical uncouplers with a broader safety window for use in treating obesity and obesity related diseases and conditions such as atherosclerosis, hypertension, diabetes, impaired glucose tolerance, dyslipidemia, coronary heart disease, gallbladder disease, osteoarthritis, endometrial, breast, prostate and colon cancers, premature death as well as other conditions which are improved by an increase in mitochondrial respiration. More specifically, the invention provides the use of compds. with an Emax of <75% of the Emax of carbonyl cyanide p-trifluoromethoxyphenylhydrazone (FCCP) in a specified assay for increasing mitochondrial respiration. Thus, 3-tert-butyl-5-chloro-2-hydroxy-6-methyl-N-(4-nitro-2-trifluoromethylphenyl)benzamide (prepared from 3-tert-butyl-5-chloro-6-methylsalicylic acid and 4-nitro-2-trifluoromethylaniline) increased glucose utilization in FSK4 cells with EC50 <0.03 μM and Emax = 75% of FCCP.

IC ICM A61K031-00

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 27, 29

ST arene prepn mitochondrial uncoupler obesity treatment; atherosclerosis hypertension cancer diabetes dyslipidemia heart disease treatment arene; indolylmethylenemalononitrile benzamide prepn mitochondrial respiration increase; butylchlorohydroxymethylnitrotrifluoromethylphenylbenzamide prepn chem uncoupler

IT Drugs

(antiaging; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Antiarteriosclerotics

(antiatherosclerotics; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Injury

(arterial endothelial; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Endothelium

(arterial, disease, injury; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Injury

(cardiac, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Intestine, neoplasm

(colon, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Artery, disease

(coronary, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Neuron

(damage treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Blood vessel, disease

(diabetic microangiopathy, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Uterus, neoplasm

(endometrium, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Artery, disease
 (endothelium injury; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Disease, animal
 (impaired glucose tolerance; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Heart, disease
 (injury, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Respiration, animal
 (mitochondrial, enhancers; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Diabetes mellitus
 (non-insulin-dependent, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Nerve
 (peripheral, peripheral nerve cell apoptosis treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Anti-Alzheimer's agents
 Antiarthritics
 Antidiabetic agents
 Antihypertensives
 Antiobesity agents
 Cardiovascular agents
 Human
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Eye
 (retina, diabetic microvascular disease treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Aging, animal
 Alzheimer's disease
 Atherosclerosis
 Cataract
 Diabetes mellitus
 Gallbladder, disease
 Hypertension
 Mammary gland, neoplasm
 Neoplasm
 Obesity
 Osteoarthritis
 Prostate gland, neoplasm
 (treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Dyslipidemia
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 17209-15-3P 24985-23-7P 59266-20-5P 59266-35-2P 62546-96-7P
 71308-35-5P 120607-82-1P 147167-95-1P 157397-08-5P 170449-05-5P
 186582-17-2P 340302-38-7P 691887-18-0P 691887-19-1P 691887-26-0P
 691887-27-1P 691887-28-2P 691887-29-3P 691887-30-6P 691887-31-7P
 691887-32-8P 691887-33-9P 691887-34-0P 691887-35-1P 691887-38-4P
 691887-39-5P 691887-40-8P 691887-41-9P 691887-42-0P 691887-43-1P
 691887-44-2P 691887-45-3P 691887-46-4P 691887-47-5P 691887-48-6P

691887-49-7P 691887-50-0P 691887-51-1P 691887-52-2P 691887-53-3P
 691887-54-4P 691887-55-5P 691887-56-6P 691887-57-7P 691887-58-8P
 691887-59-9P 691887-60-2P 691887-61-3P 691887-62-4P 691887-63-5P
 691887-64-6P 691887-65-7P 691887-66-8P 691887-67-9P 691887-69-1P
 691887-70-4P 691887-72-6P 691887-73-7P 691887-74-8P 691887-75-9P
 691887-76-0P 691887-77-1P 691887-78-2P 691887-79-3P 691887-80-6P
 691887-81-7P 691887-82-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 728-40-5 1211-35-4 1420-07-1 1568-70-3, 4-Methoxy-2-nitrophenol
 3244-54-0, 3,6-Dinitrocarbazole 3293-92-3 5329-21-5 6322-56-1,
 4-Hydroxy-3-nitroacetophenone 10278-46-3, N-(4-Cyanophenyl)benzamide
 10537-47-0 10537-84-5 14601-82-2 17109-36-3 19037-69-5
 22014-02-4 53566-09-9 62546-89-8 65570-43-6 96330-29-9
 106480-61-9 122453-73-0 122454-29-9 256471-14-4 282542-01-2
 288859-92-7 303147-77-5 306980-85-8 691887-20-4 691887-21-5
 691887-22-6 691887-23-7 691887-24-8 691887-25-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 88-17-5, 2-Trifluoromethylaniline 99-30-9, 2,6-Dichloro-4-nitroaniline
 105-56-6, Ethyl cyanoacetate 109-77-3, Malononitrile 121-01-7
 121-50-6, 2-Chloro-5-trifluoromethylaniline 121-87-9,
 2-Chloro-4-nitroaniline 128-37-0, 2,6-Di-tert-butyl-4-methylphenol,
 reactions 304-06-3, 3-Phenylsalicylic acid 320-51-4 328-74-5,
 3,5-Bistrifluoromethylaniline 328-93-8, 2,5-Bistrifluoromethylaniline
 393-11-3, 4-Nitro-3-trifluoromethylaniline 535-52-4,
 2-Fluoro-5-trifluoromethylaniline 548-51-6, 3-Isopropyl-6-
 methylsalicylic acid 554-00-7, 2,4-Dichloroaniline 555-21-5,
 4-Nitrophenylacetonitrile 654-70-6, 4-Cyano-3-trifluoromethylaniline
 873-74-5, 4-Cyanoaniline 998-40-3, Tributylphosphine 1620-98-0
 1851-09-8, 4-Chlorophenylsulfonylacetone 2233-18-3 2274-42-2,
 Methanesulfonylacetone 2338-75-2, 4-Trifluoromethylphenylacetone
 2537-48-6, Diethyl cyanomethylphosphonate 2683-43-4,
 2,4-Dichloro-6-nitroaniline 2739-97-1, 2-Pyridylacetone 3558-17-6
 4389-53-1 5059-30-3, 2-Chloro-3-formylindole 6625-96-3,
 5-Nitro-3-formylindole 6934-03-8, 3-tert-Butyl-6-methylsalicylic acid
 7053-88-5, 3-Isopropylsalicylic acid 7605-28-9,
 Phenylsulfonylacetone 14035-33-7, 3',5'-Di-tert-butyl-4'-
 hydroxyacetophenone 17722-17-7 17826-09-4 19715-19-6,
 3,5-Di-tert-butylsalicylic acid 21803-75-8, 2-Chloro-4-cyanoaniline
 23050-96-6, 3-tert-Butyl-5-methylsalicylic acid 25365-71-3,
 2-Phenyl-3-formylindole 32083-66-2, 4-Fluorophenylsulfonylacetone
 41648-48-0 49561-96-8, 4-Trifluoromethoxyphenylacetone 59889-29-1
 61437-85-2 62593-17-3, 2,4-Dichloro-6-trifluoromethylaniline
 67515-55-3, 4-Fluoro-3-trifluoromethylbenzoic acid 85068-32-2
 87475-64-7 87617-29-6 115754-21-7 119910-45-1 120069-21-8,
 Isopropylsulfonylacetone 126891-45-0 142350-18-3 161622-05-5,
 3-Fluoro-5-trifluoromethylbenzoic acid 174824-16-9, 2-Bromo-3,5-
 bistrifluoromethylaniline 203310-42-3 691887-83-9 691887-84-0
 691887-85-1 691887-86-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the

501 C 699 3

4/06/2006

Zhang 10/699,338

Zhang 10/644

12/06/2006

(treatment of obesity)

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L2 1 SEA FILE=WPIX ABB=ON PLU=ON US2003-699338/APPS

=> d iall code

YOU HAVE REQUESTED DATA FROM FILE 'WPIX' - CONTINUE? (Y)/N:y

L2 ANSWER 1 OF 1 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-400527 [37] WPIX
 CROSS REFERENCE: 2005-012849
 DOC. NO. CPI: C2004-149979 [37]
 TITLE: Use of chemical uncoupler compounds e.g.
 4-methoxy-2-nitrophenol to increase mitochondrial
 respiration in patients with e.g. obesity
 DERWENT CLASS: B05
 INVENTOR: COLDING-JORGENSEN M; HANSEN B S; HANSEN T K; TULLIN S
 PATENT ASSIGNEE: (COLD-I) COLDING-JORGENSEN M; (HANS-I) HANSEN B S;
 (HANS-I) HANSEN T K; (NOVO-C) NOVO NORDISK AS; (TULL-I)
 TULLIN S
 COUNTRY COUNT: 106

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004041256	A2	20040521	(200437)*	EN	133 [3]	A61K031-00
US 20040138301	A1	20040715	(200447)	EN		A61K031-277
AU 2003275939	A1	20040607	(200469)	EN		
EP 1575575	A2	20050921	(200562)	EN		A61K031-04
JP 2006514101	W	20060427	(200628)	JA	109	
AU 2003275939	A8	20051103	(200629)	EN		A61K031-04

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004041256	A2	WO 2003-DK742	20031031
US 20040138301	A1 Provisional	US 2002-425642P	20021112
US 20040138301	A1 Provisional	US 2003-476275P	20030605
AU 2003275939	A1	AU 2003-275939	20031031
EP 1575575	A2	EP 2003-810374	20031031
US 20040138301	A1	<u>US 2003-699338</u>	<u>20031031</u>
EP 1575575	A2	WO 2003-DK742	20031031
JP 2006514101	W	WO 2003-DK742	20031031
JP 2006514101	W	JP 2005-502095	20031031
AU 2003275939	A8	AU 2003-275939	20031031

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003275939	A1	Based on WO 2004041256 A

EP 1575575	A2	Based on	WO 2004041256	A
JP 2006514101	W	Based on	WO 2004041256	A
AU 2003275939	A8	Based on	WO 2004041256	A

PRIORITY APPLN. INFO: DK 2003-827 20030604
DK 2002-1719 20021108
DK 2003-734 20030514

INT. PATENT CLASSIF.:

MAIN: A61K031-00; A61K031-04; A61K031-277
SECONDARY: A61K031-06; C07C205-12; C12N005-00; C12Q001-00;
G01N033-50
IPC ORIGINAL: A61K0031-045 [I,C]; A61K0031-06 [I,A]; A61K0031-075 [I,C];
; A61K0031-085 [I,A]; A61K0031-121 [I,A]; A61K0031-122
[I,A]; A61K0031-167 [I,A]; A61K0031-185 [I,C];
A61K0031-192 [I,A]; A61K0031-21 [I,C]; A61K0031-216 [I,A]
; A61K0031-275 [I,C]; A61K0031-277 [I,A]; A61K0031-366
[I,A]; A61K0031-40 [I,A]; A61K0031-403 [I,A];
A61K0031-404 [I,A]; A61K0031-4402 [I,A]; A61K0031-66
[I,A]; A61P0045-00 [I,A]; A61P0001-00 [I,C]; A61P0001-16
[I,A]; A61P0013-00 [I,C]; A61P0013-12 [I,A]; A61P0019-00
[I,C]; A61P0019-02 [I,A]; A61P0025-00 [I,A]; A61P0025-02
[I,A]; A61P0025-28 [I,A]; A61P0027-00 [I,C]; A61P0027-02
[I,A]; A61P0027-12 [I,A]; A61P0003-00 [I,C]; A61P0003-04
[I,A]; A61P0003-06 [I,A]; A61P0003-10 [I,A]; A61P0035-00
[I,A]; A61P0039-00 [I,C]; A61P0039-04 [I,A]; A61P0039-06
[I,A]; A61P0043-00 [I,A]; A61P0009-00 [I,A]; A61P0009-10
[I,A]; A61P0009-12 [I,A]

BASIC ABSTRACT:

WO 2004041256 A2 UPAB: 20060121

NOVELTY - Increasing mitochondrial respiration comprises the use of chemical uncoupler compounds (A) or their salts, solvates or prodrugs.

DETAILED DESCRIPTION - Increasing mitochondrial respiration comprises the use of chemical uncoupler compounds (A) or their salts, solvates or prodrugs characterized by slope calculated from the equation $X_n = (Y_2 - Y_0) / (Y_1 - Y_0)$ (E) with the value of slope less than the value for the slope calculated from the equation (E) with carbonylcyanide p-trifluoromethoxy-phenylhydrazone as test compound in assay (I) or its salt, solvate or prodrug.

Y_0 = degree of stimulation measured as counts per minute (cpm) in Assay (I) in control samples without added test compound;

Y_1 = degree of stimulation measured as cpm in Assay (I) (glucose utilization in a human hepatocytes cell line (HEP-G2 cells) assay) with added test compound in a concentration of median effective concentration (EC50) divide2 or EC50divide3;

Y_2 = degree of stimulation measured as cpm in Assay (I) with added test compound in concentration of 2xEC50 or 3xEC50;

n = slope; and

X = 2 or 3.

where Y_1 is measured with test compound in a concentration of EC50/3, Y_2 is measured by test compound in concentration of 3xEC50 and X is 3.

where Y_1 is measured with test compound in a concentration of EC50/2, Y_2 is measured by test compound in concentration of 2xEC50 and X is 2.

ACTIVITY - Antidiabetic; Antilipemic; Anorectic; Cytostatic; Nootropic; Cardiant; Neuroprotective; Nephrotropic.

(A) were tested for their ability to increase mitochondrial

respiration activity by glucose utilisation in a human hepatocytes cell line (HEP-G2 cells) assay. The results showed that the median effective concentration of 3-tert-Butyl-5-chloro-2-hydroxy-6-methyl-N-(4-nitro-2-trifluoromethyl-phenyl)-benzamide was found to be 0.03 microM.

MECHANISM OF ACTION - None given.

USE - (A) are useful for treating, a condition benefiting from an increase in mitochondrial respiration (such as type 2 diabetes, dyslipidemia or obesity) and a condition benefiting from a reduction of reactive oxygen species in a patient (such as aging process, damage of heart tissue, damage of endothelial cells, damage of neuronal tissue, Alzheimer's disease, cancer, cataract, diabetic microvascular diseases in the retina, renal glomerus and peripheral nerve cell apoptosis) (all claimed).

MANUAL CODE: CPI: B05-B01F; B06-H; B07-H; B10-A09B; B10-A10; B10-A15; B10-A20; B10-B01A; B10-B03; B10-B04A; B10-C03; B10-C04B; B10-C04C; B10-D01; B10-D03; B10-E02; B14-C09A; B14-E12; B14-F01; B14-F02B; B14-F06; B14-F07; B14-F09; B14-H01; B14-J01A4; B14-N03; B14-N17B; B14-S04

AN 2004-400527 [37] WPIX

DC B05

IC ICM A61K031-00; A61K031-04; A61K031-277

ICS A61K031-06; C07C205-12; C12N005-00; C12Q001-00; G01N033-50

IPCI A61K0031-045 [I,C]; A61K0031-06 [I,A]; A61K0031-075 [I,C]; A61K0031-085 [I,A]; A61K0031-121 [I,A]; A61K0031-122 [I,A]; A61K0031-167 [I,A]; A61K0031-185 [I,C]; A61K0031-192 [I,A]; A61K0031-21 [I,C]; A61K0031-216 [I,A]; A61K0031-275 [I,C]; A61K0031-277 [I,A]; A61K0031-366 [I,A]; A61K0031-40 [I,A]; A61K0031-403 [I,A]; A61K0031-404 [I,A]; A61K0031-4402 [I,A]; A61K0031-66 [I,A]; A61K0045-00 [I,A]; A61P0001-00 [I,C]; A61P0001-16 [I,A]; A61P0013-00 [I,C]; A61P0013-12 [I,A]; A61P0019-00 [I,C]; A61P0019-02 [I,A]; A61P0025-00 [I,A]; A61P0025-02 [I,A]; A61P0025-28 [I,A]; A61P0027-00 [I,C]; A61P0027-02 [I,A]; A61P0027-12 [I,A]; A61P0003-00 [I,C]; A61P0003-04 [I,A]; A61P0003-06 [I,A]; A61P0003-10 [I,A]; A61P0035-00 [I,A]; A61P0039-00 [I,C]; A61P0039-04 [I,A]; A61P0039-06 [I,A]; A61P0043-00 [I,A]; A61P0009-00 [I,A]; A61P0009-10 [I,A]; A61P0009-12 [I,A]

MC CPI: B05-B01F; B06-H; B07-H; B10-A09B; B10-A10; B10-A15; B10-A20; B10-B01A; B10-B03; B10-B04A; B10-C03; B10-C04B; B10-C04C; B10-D01; B10-D03; B10-E02; B14-C09A; B14-E12; B14-F01; B14-F02B; B14-F06; B14-F07; B14-F09; B14-H01; B14-J01A4; B14-N03; B14-N17B; B14-S04

CMC UPB 20060121

M2 *01* G015 G100 H3 H341 H4 H401 H441 H5 H541 H8 M210 M211 M272 M281
M320 M414 M510 M520 M531 M540 M781 P421 P446 P522 P526 P625 P633
P731 P814 P816 P922 P942 M905 M904

DCN: RA3MHC-K RA3MHC-T RA3MHC-U

DCR: 85551-K 85551-T 85551-U

M2 *02* G015 G100 H3 H341 H4 H401 H441 H8 J5 J581 M210 M211 M262 M281
M320 M414 M510 M520 M531 M540 M781 P421 P446 P522 P526 P625 P633
P731 P814 P816 P922 P942 M905 M904

DCN: RA9KNG-K RA9KNG-T RA9KNG-U

DCR: 665320-K 665320-T 665320-U

M2 *03* D013 D023 D120 H3 H341 H4 H401 H441 H8 J5 J521 L9 L942 M210 M211
M240 M281 M320 M412 M511 M520 M530 M540 M781 P421 P446 P522 P526
P625 P633 P731 P814 P816 P922 P942 M905 M904

DCN: RAED7B-K RAED7B-T RAED7B-U

DCR: 906824-K 906824-T 906824-U

M2 *04* G015 G019 G100 H3 H342 H4 H402 H442 H8 J0 J011 J1 J171 M1 M121
M132 M150 M280 M314 M321 M331 M343 M372 M391 M414 M510 M520 M532

M540 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942
 M905 M904
 DCN: RA0F5T-K RA0F5T-T RA0F5T-U
 DCR: 220466-K 220466-T 220466-U

M2 *05* G015 G017 G100 H3 H341 H4 H401 H441 H6 H602 H608 H642 H8 J0 J011
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 P814 P816 P922 P942 M905 M904
 DCN: RAED7C-K RAED7C-T RAED7C-U
 DCR: 906827-K 906827-T 906827-U

M2 *06* G015 G016 G100 H6 H685 H689 J0 J011 J3 J331 K0 L1 L143 M1 M121
 M136 M280 M311 M323 M344 M353 M393 M414 M510 M520 M532 M540 M781
 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942 M905
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 DCN: RAED7D-K RAED7D-T RAED7D-U
 DCR: 906828-K 906828-T 906828-U

M2 *07* G010 G013 G100 J0 J011 J3 J331 K0 L1 L143 M1 M121 M136 M280 M320
 M414 M510 M520 M532 M540 M781 P421 P446 P522 P526 P625 P633 P731
 P814 P816 P922 P942 M905 M904
 DCN: RAED7E-K RAED7E-T RAED7E-U
 DCR: 906829-K 906829-T 906829-U

M2 *08* G010 G015 G019 G100 H4 H401 H441 H6 H602 H603 H608 H643 H8 J0
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 DCN: RAED7F-K RAED7F-T RAED7F-U
 DCR: 906830-K 906830-T 906830-U

M2 *09* G015 G017 G100 H3 H341 H4 H401 H441 H6 H602 H641 H8 J0 J011 J3
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 M520 M532 M540 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816
 P922 P942 M905 M904
 DCN: RAED7H-K RAED7H-T RAED7H-U
 DCR: 906832-K 906832-T 906832-U

M2 *10* D022 D029 E100 H3 H342 M280 M320 M412 M511 M520 M530 M540 M781
 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942 M905
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 DCN: RAED7I-K RAED7I-T RAED7I-U
 DCR: 906833-K 906833-T 906833-U

M2 *11* G010 G012 G015 G100 H5 H594 H6 H685 H9 J0 J011 J3 J331 K0 L1
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 P816 P922 P942 M905 M904
 DCN: RAED7J-K RAED7J-T RAED7J-U
 DCR: 906834-K 906834-T 906834-U

M2 *12* B515 B720 B744 B814 B831 C035 C100 C720 C800 C801 C803 C804 C805
 C806 C807 G010 G017 G019 G100 H4 H401 H441 H8 M1 M121 M129 M144
 M210 M214 M233 M240 M282 M311 M321 M342 M351 M391 M411 M510 M520
 M533 M540 M640 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816
 P922 P942 M905 M904
 DCN: RAED7S-K RAED7S-T RAED7S-U
 DCR: 906843-K 906843-T 906843-U

M2 *13* B515 B720 B744 B814 B831 C035 C100 C720 C800 C801 C803 C804 C805
 C806 C807 G017 G030 G039 G111 G563 G599 H4 H401 H441 H8 M1 M126
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 M510 M520 M531 M543 M640 M781 P421 P446 P522 P526 P625 P633 P731
 P814 P816 P922 P942 M905 M904
 DCN: RAED7T-K RAED7T-T RAED7T-U

DCR: 906845-K 906845-T 906845-U
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 C806 C807 G017 G100 H4 H401 H441 H8 M210 M214 M231 M233 M240
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 M640 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942
 M905 M904
 DCN: RAED7V-K RAED7V-T RAED7V-U
 DCR: 906848-K 906848-T 906848-U
 M2 *15* B515 B720 B744 B814 B831 C035 C100 C720 C800 C801 C803 C804 C805
 C806 C807 G017 G100 H4 H401 H441 H8 M210 M214 M220 M222 M231
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 M531 M540 M640 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816
 P922 M905 M904
 DCN: RAED7X-K RAED7X-T RAED7X-U
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 P731 P814 P816 P922 P942 M905 M904
 DCN: RAED7Y-K RAED7Y-T RAED7Y-U
 DCR: 906851-K 906851-T 906851-U
 M2 *17* G017 G100 H4 H401 H441 H7 H721 H8 J0 J012 J2 J272 M210 M212 M214
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 DCN: RAED80-K RAED80-T RAED80-U
 DCR: 906853-K 906853-T 906853-U
 M2 *18* G017 G036 G111 G212 H4 H401 H441 H7 H720 H8 J5 J562 M1 M123 M132
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 DCN: RAED81-K RAED81-T RAED81-U
 DCR: 906854-K 906854-T 906854-U
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 M280 M312 M321 M332 M343 M372 M391 M412 M511 M520 M531 M540 M781
 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942 M905
 M904
 DCN: RAED83-K RAED83-T RAED83-U
 DCR: 906856-K 906856-T 906856-U
 M2 *20* D012 D601 G013 G100 H6 H602 H641 M1 M113 M280 M320 M412 M511
 M520 M531 M540 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816
 P922 P942 M905 M904
 DCN: RAED84-K RAED84-T RAED84-U
 DCR: 906857-K 906857-T 906857-U
 M2 *21* D013 D601 K0 L1 L143 M210 M211 M212 M240 M283 M320 M412
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 P816 P922 P942 M905 M904
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 DCR: 906858-K 906858-T 906858-U
 M2 *22* F011 F012 F013 F014 F015 F421 G013 G100 H1 H181 H2 H201 H5 H581
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 P942 M905 M904
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 DCR: 48114-K 48114-T 48114-U
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G015 G016 G017 G018 G019 G020 G021 G022 G029 G040 G100 G111 G112
 G113 G221 G299 H321 H322 H323 H341 H342 H343 H381 H382 H383 H4
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M2 *24*
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 MCN: 0131-94702-K 0131-94702-T 0131-94702-U

M2 *25*
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 P731 P814 P816 P922 P942 M905 M904
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M2 *26*
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 MCN: 0131-94704-K 0131-94704-T 0131-94704-U

M2 *27* C216 C316 F010 F019 F020 F029 G010 G011 G012 G013 G014 G015 G016
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 MCN: 0131-94705-K 0131-94705-T 0131-94705-U

M2 *28* C216 C316 D021 D023 D024 D025 D029 D040 G010 G011 G012 G013 G014
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 P731 P814 P816 P922 P942 M905 M904
 RIN: 00722 00833
 MCN: 0131-94706-K 0131-94706-T 0131-94706-U

M2 *29* C216 C316 D021 D022 D023 D024 D025 D040 F010 F019 F020 F029 G001
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 RIN: 00722 00833
 MCN: 0131-94707-K 0131-94707-T 0131-94707-U

M2 *30* B515 B720 B744 B814 B831 G010 G017 G019 G020 G021 G029 G030 G039
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 P522 P526 P625 P633 P731 P814 P816 P922 P942 M905 M904
 MCN: 0131-94708-K 0131-94708-T 0131-94708-U

M2 *31* B515 B615 B701 B712 B720 B741 B815 B831 C216 C316 F010 F015 F019
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 M630 M640 M650 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816
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MCN: 0131-94709-K 0131-94709-T 0131-94709-U

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MCN: 0131-94710-K 0131-94710-T 0131-94710-U

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MCN: 0131-94711-K 0131-94711-T 0131-94711-U

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MCN: 0131-94712-K 0131-94712-T 0131-94712-U

M2 *35* D000 D011 D012 D013 D014 D021 D022 D023 D024 D025 D601 G001 G002
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M214 M215 M216 M220 M221 M222 M223 M224 M225 M226 M231 M232 M233
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M640 M650 M781 P421 P446 P522 P526 P625 P633 P731 P814 P816 P922
P942 M905 M904

MCN: 0131-94713-K 0131-94713-T 0131-94713-U

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M383 M391 M392 M393 M412 M511 M520 M530 M540 M630 M640 M650 M781
P421 P446 P522 P526 P625 P633 P731 P814 P816 P922 P942 M905
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MCN: 0131-94714-K 0131-94714-T 0131-94714-U

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FILE 'STNGUIDE' ENTERED AT 09:33:22 ON 06 DEC 2006

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 1, 2006 (20061201/UP).

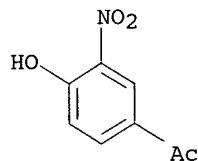
Zhang 10/699,338

12/06/2006

=> => d que
L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF

=> d ide 16
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 6322-56-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetophenone, 4'-hydroxy-3'-nitro- (7CI, 8CI)
OTHER NAMES:
CN 1-(4-Hydroxy-3-nitrophenyl)ethanone
CN 2-Nitro-4-acetylphenol
CN 3'-Nitro-4'-hydroxyacetophenone
CN 4'-Hydroxy-3'-nitroacetophenone
CN 4-Acetyl-2-nitrophenol
CN 4-Hydroxy-3-nitroacetophenone
CN NSC 32113
MF C8 H7 N O4
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM,
IFICDB, IFIPAT, IFIUDB, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

157 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
157 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> => d que
L70 22 SEA FILE=WPIX ABB=ON PLU=ON (RAED7B/SDCN OR RAED7C/SDCN OR
RAED7D/SDCN OR RAED7E/SDCN OR RAED7F/SDCN OR RAED7H/SDCN OR
RAED7I/SDCN OR RAED7J/SDCN OR RAED7S/SDCN OR RAED7T/SDCN OR
RAED7V/SDCN OR RAED7X/SDCN OR RAED7Y/SDCN OR RAED80/SDCN OR
RAED81/SDCN OR RAED83/SDCN OR RAED84/SDCN OR RAED85/SDCN OR

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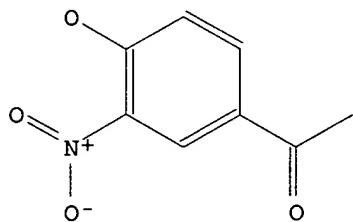
(RA0F5T/SDCN OR RA0G5N/SDCN OR RA3MHC/SDCN OR RA9KNG/SDCN)

=> d 170 ide 19

YOU HAVE REQUESTED DATA FROM FILE 'WPIX' - CONTINUE? (Y)/N:y

L70 ANSWER 19 OF 22 WPIX COPYRIGHT 2006
AN.S DCR-665320
DCSE 665320-0-0-0
CN.S 1-(4-Hydroxy-3-nitro-phenyl)-ethanone
SY 4'-HYDROXY-3'-NITROACETOPHENONE

THE THOMSON CORP on STN



MF C8 H7 N O4
SMF C8 H7 N O4 *1; TOTAL *1; TYPE *1
MW 181.1493
SDCN RA9KNG

=> => d que 157

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
 L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
 L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
 L8 QUE ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP" OR "63
 22-56-1D"
 L9 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENTS"+PFT,OLD,NEW/CT
 L10 QUE ABB=ON PLU=ON HYPERGLYCEMIA+PFT,OLD,NEW,RT/CT
 L11 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C
 T
 L12 QUE ABB=ON PLU=ON "DIABETES INSIPIDUS"+PFT,OLD,NEW,NT/
 CT
 L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERG
 LYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLY
 CEAM? OR ?GLYCAEM?
 L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYC
 EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
 PERGLUCAEM?
 L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM?
 OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
 R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
 EM?
 L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPO
 LYCEAM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
 (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR G
 LUCEAM? OR GLUCAEM?))
 L17 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
 L18 QUE ABB=ON PLU=ON ANTIOBESITY AGENTS/CT
 L19 QUE ABB=ON PLU=ON "APPETITE DEPRESSANTS"+PFT,OLD,NEW,N
 T/CT
 L20 QUE ABB=ON PLU=ON "ANTI OBESITY AGENTS"+PFT,OLD,NEW,NT/
 CT
 L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR COR
 PULENCE OR CORPULENC?
 L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
 ICORPULENC? OR ANTICORPULENT?
 L23 QUE ABB=ON PLU=ON CORPULENT
 L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDRO
 X?
 L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A)
 ?NITRO?
 L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113
 L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?TH
 ERAP? OR REMED? OR ALLEVIAT?
 L28 QUE ABB=ON PLU=ON ANORECTIC
 L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
 <2003 OR REVIEW/DT
 L43 158 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR L7
 L44 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND ((L9 OR L10 OR L11 OR
 L12) OR L17 OR L18 OR L19 OR L20)
 L45 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 (L) (THU OR PKT OR PAC OR
 DMA OR BAC)/RL
 L46 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 (L) L27
 L47 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 (L) ((L13 OR L14 OR L15

OR L16) OR (L21 OR L22 OR L23) OR L28)
 L48 20 SEA FILE=HCAPLUS ABB=ON PLU=ON (L44 OR L45 OR L46 OR L47)
 L49 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 AND (L9 OR L10 OR L11 OR
 L12 OR L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR
 L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28)
 L50 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L8(L) (THU OR PKT OR PAC OR
 DMA OR BAC)/RL
 L51 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L8(L) ((L13 OR L14 OR L15 OR
 L16) OR (L21 OR L22 OR L23) OR L28 OR L27)
 L52 51 SEA FILE=HCAPLUS ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP"
 OR "6322-56-1D"
 L53 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND ((L9 OR L10 OR L11 OR
 L12) OR L17 OR (L19 OR L20))
 L55 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (PHARM?/SC,SX)
 L56 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 OR L49 OR L50 OR L51 OR
 L53 OR L55
 L57 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 AND L41

=> d his 169

(FILE 'USPATFULL, USPAT2' ENTERED AT 10:49:42 ON 06 DEC 2006)
 L69 14 S L68 AND L42

=> d que 169

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
 L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
 L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
 L9 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENTS"+PFT,OLD,NEW/CT
 L19 QUE ABB=ON PLU=ON "APPETITE DEPRESSANTS"+PFT,OLD,NEW,N
 T/CT
 L20 QUE ABB=ON PLU=ON "ANTIODESITY AGENTS"+PFT,OLD,NEW,NT/
 CT
 L29 QUE ABB=ON PLU=ON (A61P003-04 OR A61P0003-04 OR A61P00
 3-04 OR A61P0003-04)/IPC
 L42 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
 L65 46 SEA L6 OR L7
 L66 0 SEA L65 AND L29
 L67 15 SEA L65 AND (L9 OR L19 OR L20)
 L68 15 SEA (L66 OR L67)
 L69 14 SEA L68 AND L42

=> d que 183

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERG
 LYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLY
 CEAM? OR ?GLYCAEM?
 L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYC
 EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
 PERGLUCAEM?
 L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYP(W) (GLYCEM?
 OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
 R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
 EM?

L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR GLUCAEM?))

L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE OR CORPULENC?

L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?

L23 QUE ABB=ON PLU=ON CORPULENT

L24 QUE ABB=ON PLU=ON (?ACETOPHENON?(3A)?NITRO?) (5A)?HYDROX?

L25 QUE ABB=ON PLU=ON ((?PHENOL?(3A)(ACETO? OR ACETYL?)))(5A)?NITRO?

L26 QUE ABB=ON PLU=ON (NSC(W)32113) OR NSC32113

L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?THERAP? OR REMED? OR ALLEVIAT?

L28 QUE ABB=ON PLU=ON ANORECTIC

L29 QUE ABB=ON PLU=ON (A61P003-04 OR A61P0003-04 OR A61P003-04 OR A61P003-04)/IPC

L30 QUE ABB=ON PLU=ON (B14-E07 OR C14-E07 OR B14-E12 OR C14-E12 OR B12-J02 OR C12-J02 OR B14-F09 OR C14-F09 OR B12-H05 OR C12-H05 OR B14-S04 OR C14-S04 OR B14-S04A OR C14-S04A)/MC

L31 QUE ABB=ON PLU=ON (P731 OR P816)/M0,M1,M2,M3,M4,M5,M6

L42 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003

L72 2 SEA FILE=WPIX ABB=ON PLU=ON RA9KNG/DCN

L73 3 SEA FILE=WPIX ABB=ON PLU=ON 665320/DCR,DCRE,KW

L74 3 SEA FILE=WPIX ABB=ON PLU=ON (L72 OR L73)

L75 3 SEA FILE=WPIX ABB=ON PLU=ON L74 AND L42

L76 3 SEA FILE=WPIX ABB=ON PLU=ON L75 AND ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28))

L77 1 SEA FILE=WPIX ABB=ON PLU=ON (L72 OR L73) (P)L31

L78 3 SEA FILE=WPIX ABB=ON PLU=ON (L75 OR L76 OR L77)

L79 148 SEA FILE=WPIX ABB=ON PLU=ON (L24 OR L25 OR L26)

L80 3 SEA FILE=WPIX ABB=ON PLU=ON L79 AND (L29 OR L30 OR L31)

L81 4 SEA FILE=WPIX ABB=ON PLU=ON L79 AND ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)

L82 6 SEA FILE=WPIX ABB=ON PLU=ON L78 OR L80 OR L81

L83 6 SEA FILE=WPIX ABB=ON PLU=ON L82 AND L42

=> d que 199

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS

L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3

L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS

L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF

L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM? OR ?GLYCAEM?

L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?

L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O

R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?

L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR GLUCAEM?))
 L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE OR CORPULENC?
 L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?
 L23 QUE ABB=ON PLU=ON CORPULENT
 L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A)?NITRO?) (5A)?HYDROX?
 L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?))) (5A)?NITRO?
 L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113
 L28 QUE ABB=ON PLU=ON ANORECTIC
 L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY<2003 OR REVIEW/DT
 L90 0 SEA FILE=MEDLINE ABB=ON PLU=ON L6 OR L7
 L91 48 SEA FILE=MEDLINE ABB=ON PLU=ON (L24 OR L25 OR L26)
 L92 QUE ABB=ON PLU=ON ACETOPHENONES+PFT,OLD,NEW,NT/CT
 L93 QUE ABB=ON PLU=ON "ANTI-OBESITY AGENTS"+PFT,OLD,NEW,NT/CT
 L94 QUE ABB=ON PLU=ON "HYPOGLYCEMIC AGENTS"+PFT,OLD,NEW,NT/CT
 L95 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
 L96 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/CT
 L97 60 SEA FILE=MEDLINE ABB=ON PLU=ON (L90 OR L91 OR L92) AND ((L93 OR L94 OR L95 OR L96) OR (L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)
 L99 35 SEA FILE=MEDLINE ABB=ON PLU=ON L97 AND L41

=> d que l108

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
 L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
 L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
 L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM?
 L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?
 L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYP(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? OR ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?
 L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR GLUCAEM?))
 L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR COR

PULENCE OR CORPULENC?

L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?

L23 QUE ABB=ON PLU=ON CORPULENT

L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDROX?

L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A) ?NITRO?)

L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113

L28 QUE ABB=ON PLU=ON ANORECTIC

L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY<2003 OR REVIEW/DT

L100 0 SEA FILE=EMBASE ABB=ON PLU=ON L6 OR L7

L101 QUE ABB=ON PLU=ON "ACETOPHENONE DERIVATIVE"+PFT,OLD,NE W,NT/CT

L102 812 SEA FILE=EMBASE ABB=ON PLU=ON L100 OR L101 OR (L24 OR L25 OR L26)

L103 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENT"+PFT,OLD,NEW,NT/CT

L104 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C T

L105 QUE ABB=ON PLU=ON "ANTIODESITY AGENT"+PFT,OLD,NEW,NT/C T

L106 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT

L107 9 SEA FILE=EMBASE ABB=ON PLU=ON L102 AND ((L103 OR L104 OR L105 OR L106) OR (L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)

L108 7 SEA FILE=EMBASE ABB=ON PLU=ON L107 AND L41

=> d his l122

(FILE 'BIOSIS, CABA, BIOTECHNO, DRUGU, VETU' ENTERED AT 11:24:41 ON 06 DEC 2006)

L122 7 S L121 AND L41

=> d que l122

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM? OR ?GLYCAEM?

L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?

L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? OR ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?

L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCEAM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCAEM?))

L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE OR CORPULENC?

L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?

L23 QUE ABB=ON PLU=ON CORPULENT

2006/2006

06/2006

Zhang 10/699,338

Zhang 10/699

12/06/2006

L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?TH
ERAP? OR REMED? OR ALLEVIAT?
L28 QUE ABB=ON PLU=ON ANORECTIC
L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
<2003 OR REVIEW/DT
L119 250 SEA ?ACETOPHEN?(15A) ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22
OR L23) OR L28 OR L27)
L120 8 SEA ?ACETOPHEN?(15A) ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22
OR L23) OR L28)
L121 8 SEA L119 AND L120
L122 7 SEA L121 AND L41

=> d his l129

(FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, JICST-EPLUS, JAPIO, LIFESCI,
BIOENG, CABA, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH,
CONFSCI, DISSABS' ENTERED AT 11:41:58 ON 06 DEC 2006)

L129 36 S L126 AND L41
SAVE TEMP L129 ZHA338MUL1B/A

=> d que l129

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERG
LYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLY
CEAM? OR ?GLYCAEM?
L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYC
EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
PERGLUCAEM?
L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM?
OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
EM?
L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOG
LYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
(HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR G
LUCEAM? OR GLUCAEM?))
L21 QUE ABB=ON PLU=ON OBESITY OR ADIPOSITY OR COR
PULENCE OR CORPULENC?
L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
ICORPULENC? OR ANTICORPULENT?
L23 QUE ABB=ON PLU=ON CORPULENT
L24 QUE ABB=ON PLU=ON (?ACETOPHENON?(3A)?NITRO?) (5A)?HYDRO
X?
L25 QUE ABB=ON PLU=ON ((?PHENOL?(3A)(ACETO? OR ACETYL?)) (5A)?NITRO?
L26 QUE ABB=ON PLU=ON (NSC(W)32113) OR NSC32113
L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?TH
ERAP? OR REMED? OR ALLEVIAT?
L28 QUE ABB=ON PLU=ON ANORECTIC
L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
<2003 OR REVIEW/DT
L124 896 SEA (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A) ((L13 OR L14 OR L15
OR L16) OR (L21 OR L22 OR L23) OR L28 OR L27)
L125 38 SEA (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A) ((L13 OR L14 OR L15
OR L16) OR (L21 OR L22 OR L23) OR L28)
L126 38 SEA L124 AND L125
L129 36 SEA L126 AND L41

=> dup rem 157 169 183 199 1108 1122 1129
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PROCESSING COMPLETED FOR L69
PROCESSING COMPLETED FOR L83
PROCESSING COMPLETED FOR L99
PROCESSING COMPLETED FOR L108
PROCESSING COMPLETED FOR L122
PROCESSING COMPLETED FOR L129
L130 101 DUP REM L57 L69 L83 L99 L108 L122 L129 (32 DUPLICATES REMOVED)

38 75-22265 10/699,338 10/699,338 12/06/2006

ANSWERS '1-28' FROM FILE HCAPLUS
ANSWERS '29-35' FROM FILE USPATFULL
ANSWERS '36-40' FROM FILE WPIX
ANSWERS '41-78' FROM FILE MEDLINE
ANSWERS '79-84' FROM FILE EMBASE
ANSWERS '85-88' FROM FILE BIOSIS
ANSWERS '89-90' FROM FILE JAPIO
ANSWERS '91-100' FROM FILE DRUGB
ANSWER '101' FROM FILE DISSABS

=> file stnguide

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LAST RELOADED: Dec 1 2006 (20061201/HP)

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YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE,
BIOSIS, JAPIO, DRUGB, DISSABS' - CONTINUE? (Y)/N:y

L130 ANSWER 1 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2004:412795 HCAPLUS
DOCUMENT NUMBER: 140:423475
TITLE: Preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity
INVENTOR(S): Hansen, Birgit Sehested; Tullin, Soren; Hansen, Thomas Kruse; Colding-Jorgensen, Morten
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041256	A2	20040521	WO 2003-DK742	20031031 <--
WO 2004041256	A3	20040902		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
AU 2003275939	A1	20040607	AU 2003-275939	20031031 <--
US 2004138301	A1	20040715	US 2003-699338	20031031 <--
EP 1575575	A2	20050921	EP 2003-810374	20031031 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
JP 2006514101	T2	20060427	JP 2005-502095	20031031 <--
PRIORITY APPLN. INFO.:			DK 2002-1719	A 20021108 <--
			DK 2003-734	A 20030514
			DK 2003-827	A 20030604
			US 2002-425642P	P 20021112 <--
			US 2003-476275P	P 20030605
			WO 2003-DK742	W 20031031

OTHER SOURCE(S): CASREACT 140:423475; MARPAT 140:423475

ED Entered STN: 21 May 2004

AB This invention relates to chemical uncouplers with a broader safety window for use in treating obesity and obesity related diseases and conditions such as atherosclerosis, hypertension, diabetes, impaired glucose tolerance, dyslipidemia, coronary heart disease, gallbladder disease, osteoarthritis, endometrial, breast, prostate and colon cancers, premature death as well as other conditions which are improved by an increase in mitochondrial respiration. More

specifically, the invention provides the use of compds. with an Emax of <75% of the Emax of carbonyl cyanide p-trifluoromethoxyphenylhydrazone (FCCP) in a specified assay for increasing mitochondrial respiration. Thus, 3-tert-butyl-5-chloro-2-hydroxy-6-methyl-N-(4-nitro-2-trifluoromethylphenyl)benzamide (prepared from 3-tert-butyl-5-chloro-6-methylsalicylic acid and 4-nitro-2-trifluoromethylaniline) increased glucose utilization in FSK4 cells with EC50 <0.03 μ M and Emax = 75% of FCCP.

IC ICM A61K031-00

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1, 27, 29

ST arene prepn mitochondrial uncoupler obesity treatment; atherosclerosis hypertension cancer diabetes dyslipidemia heart disease treatment arene; indolylmethylenemalononitrile benzamide prepn mitochondrial respiration increase; butylchlorohydroxymethylnitrotri fluoromethylphenylbenzamide prepn chem uncoupler

IT Drugs
(antiaging; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Antiarteriosclerotics
(antiatherosclerotics; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Injury
(arterial endothelial; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Endothelium
(arterial, disease, injury; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Injury
(cardiac, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Intestine, neoplasm
(colon, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Artery, disease
(coronary, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Neuron
(damage treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Blood vessel, disease
(diabetic microangiopathy, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Uterus, neoplasm
(endometrium, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Artery, disease
(endothelium injury; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Disease, animal

(impaired glucose tolerance; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Heart, disease
 (injury, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Respiration, animal
 (mitochondrial, enhancers; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Diabetes mellitus
 (non-insulin-dependent, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Nerve
 (peripheral, peripheral nerve cell apoptosis treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Anti-Alzheimer's agents
 Antiarthritics
Antidiabetic agents
 Antihypertensives
Antiobesity agents
 Cardiovascular agents
 Human
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Eye
 (retina, diabetic microvascular disease treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Aging, animal
 Alzheimer's disease
 Atherosclerosis
 Cataract
Diabetes mellitus
 Gallbladder, disease
 Hypertension
 Mammary gland, neoplasm
 Neoplasm
Obesity
 Osteoarthritis
 Prostate gland, neoplasm
 (treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Dyslipidemia
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 17209-15-3P 24985-23-7P 59266-20-5P 59266-35-2P 62546-96-7P
 71308-35-5P 120607-82-1P 147167-95-1P 157397-08-5P 170449-05-5P
 186582-17-2P 340302-38-7P 691887-18-0P 691887-19-1P 691887-26-0P
 691887-27-1P 691887-28-2P 691887-29-3P 691887-30-6P 691887-31-7P
 691887-32-8P 691887-33-9P 691887-34-0P 691887-35-1P 691887-38-4P
 691887-39-5P 691887-40-8P 691887-41-9P 691887-42-0P 691887-43-1P
 691887-44-2P 691887-45-3P 691887-46-4P 691887-47-5P 691887-48-6P

691887-49-7P	691887-50-0P	691887-51-1P	691887-52-2P	691887-53-3P
691887-54-4P	691887-55-5P	691887-56-6P	691887-57-7P	691887-58-8P
691887-59-9P	691887-60-2P	691887-61-3P	691887-62-4P	691887-63-5P
691887-64-6P	691887-65-7P	691887-66-8P	691887-67-9P	691887-69-1P
691887-70-4P	691887-72-6P	691887-73-7P	691887-74-8P	691887-75-9P
691887-76-0P	691887-77-1P	691887-78-2P	691887-79-3P	691887-80-6P
691887-81-7P	691887-82-8P			

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 728-40-5 1211-35-4 1420-07-1. 1568-70-3, 4-Methoxy-2-nitrophenol
 3244-54-0, 3,6-Dinitrocarbazole 3293-92-3 5329-21-5 **6322-56-1**,
 , 4-Hydroxy-3-nitroacetophenone 10278-46-3, N-(4-Cyanophenyl)benzamide
 10537-47-0 10537-84-5 . 14601-82-2 17109-36-3 19037-69-5
 22014-02-4 53566-09-9 62546-89-8 65570-43-6 96330-29-9
 106480-61-9 122453-73-0 122454-29-9 256471-14-4 282542-01-2
 288859-92-7 303147-77-5 306980-85-8 691887-20-4 691887-21-5
 691887-22-6 691887-23-7 691887-24-8 691887-25-9

RL: **PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)**

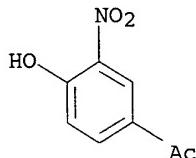
(preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 88-17-5, 2-Trifluoromethylaniline 99-30-9, 2,6-Dichloro-4-nitroaniline
 105-56-6, Ethyl cyanoacetate 109-77-3, Malononitrile 121-01-7
 121-50-6, 2-Chloro-5-trifluoromethylaniline 121-87-9,
 2-Chloro-4-nitroaniline 128-37-0, 2,6-Di-tert-butyl-4-methylphenol,
 reactions 304-06-3, 3-Phenylsalicylic acid 320-51-4 328-74-5,
 3,5-Bistrifluoromethylaniline 328-93-8, 2,5-Bistrifluoromethylaniline
 393-11-3, 4-Nitro-3-trifluoromethylaniline 535-52-4,
 2-Fluoro-5-trifluoromethylaniline 548-51-6, 3-Isopropyl-6-
 methylsalicylic acid 554-00-7, 2,4-Dichloroaniline 555-21-5,
 4-Nitrophenylacetonitrile 654-70-6, 4-Cyano-3-trifluoromethylaniline
 873-74-5, 4-Cyanoaniline 998-40-3, Tributylphosphine 1620-98-0
 1851-09-8, 4-Chlorophenylsulfonylacetonitrile 2233-18-3 2274-42-2,
 Methanesulfonylacetonitrile 2338-75-2, 4-Trifluoromethylphenylacetonitrile
 2537-48-6, Diethyl cyanomethylphosphonate 2683-43-4,
 2,4-Dichloro-6-nitroaniline 2739-97-1, 2-Pyridylacetonitrile 3558-17-6
 4389-53-1 5059-30-3, 2-Chloro-3-formylindole 6625-96-3,
 5-Nitro-3-formylindole 6934-03-8, 3-tert-Butyl-6-methylsalicylic acid
 7053-88-5, 3-Isopropylsalicylic acid 7605-28-9,
 Phenylsulfonylacetonitrile 14035-33-7, 3',5'-Di-tert-butyl-4'-
 hydroxyacetophenone 17722-17-7 17826-09-4 19715-19-6,
 3,5-Di-tert-butylsalicylic acid 21803-75-8, 2-Chloro-4-cyanoaniline
 23050-96-6, 3-tert-Butyl-5-methylsalicylic acid 25365-71-3,
 2-Phenyl-3-formylindole 32083-66-2, 4-Fluorophenylsulfonylacetonitrile
 41648-48-0 49561-96-8, 4-Trifluoromethoxyphenylacetonitrile 59889-29-1
 61437-85-2 62593-17-3, 2,4-Dichloro-6-trifluoromethylaniline
 67515-55-3, 4-Fluoro-3-trifluoromethylbenzoic acid 85068-32-2
 87475-64-7 87617-29-6 115754-21-7 119910-45-1 120069-21-8,
 Isopropylsulfonylacetonitrile 126891-45-0 142350-18-3 161622-05-5,
 3-Fluoro-5-trifluoromethylbenzoic acid 174824-16-9, 2-Bromo-3,5-
 bistrifluoromethylaniline 203310-42-3 691887-83-9 691887-84-0
 691887-85-1 691887-86-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (hetero)arenes as safe mitochondrial uncouplers for the

IT treatment of obesity)
6322-56-1, 4-Hydroxy-3-nitroacetophenone
RL: PAC (Pharmacological activity); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
(preparation of (hetero)arenes as safe mitochondrial uncouplers for the
treatment of obesity)
RN 6322-56-1 HCPLUS
CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



=> d ibib ed ab hitind hitstr 2-28
YOU HAVE REQUESTED DATA FROM FILE 'HCPLUS, USPATFULL, WPIX, MEDLINE, EMBASE,
BIOSIS, JAPIO, DRUGB, DISSABS' - CONTINUE? (Y)/N:y

L130 ANSWER 2 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 1998:471470 HCPLUS
DOCUMENT NUMBER: 129:108907
TITLE: Preparation of N-[3-(2-alkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β₃ adrenoceptor agonists
INVENTOR(S): Washburn, William N.; Girotra, Ravindar N.; Sher, Philip M.; Mikkilineni, Amarendra B.; Poss, Kathleen M.; Mathur, Arvind; Bisacchi, Gregory S.; Gavai, Ashvinikumar V.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
SOURCE: U.S., 79 pp., Cont.-in-part of U. S. Ser. No. 171,285, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5776983	A	19980707	US 1994-346543	19941202 <--
TW 424082	B	20010301	TW 1994-83111890	19941219 <--
HU 72302	A2	19960429	HU 1994-3694	19941220 <--
HU 220063	B	20011028		
CA 2138675	AA	19950622	CA 1994-2138675	19941221 <--
FI 9406003	A	19950622	FI 1994-6003	19941221 <--
NO 9404969	A	19950622	NO 1994-4969	19941221 <--
AU 9481635	A1	19950629	AU 1994-81635	19941221 <--
AU 688417	B2	19980312		
JP 07206806	A2	19950808	JP 1994-336251	19941221 <--

CN 1109050	A	19950927	CN 1994-113297	19941221 <--
ZA 9410213	A	19960621	ZA 1994-10213	19941221 <--
AT 235463	E	20030415	AT 1994-120281	19941221 <--
ES 2194857	T3	20031201	ES 1994-120281	19941221 <--
PRIORITY APPLN. INFO.:			US 1993-171285	B2 19931221 <--

OTHER SOURCE(S): MARPAT 129:108907

ED Entered STN: 29 Jul 1998

AB R₁SO₂NHZ1CH(OH)CHR6NHCR3R4Z2R2 [R₁ = alkyl or aryl(alkyl); R₂ = (un)substituted Ph; R₃ = H, alkyl, heterocyclyl, etc.; R₄ = H, alkyl, etc.; R₆ = H or alkyl; Z₁ = (un)substituted 1,3-phenylene; Z₂ = bond, (acyl)methylene, (CH₂)₂₋₃] were prepared as β₃ adrenoceptor agonists (no data). Thus, 3,4-(MeO)2C₆H₃CH(NH₂)CH₂Ph was N-alkylated by 4,3-(PhCH₂O)(MeSO₂NH)C₆H₃COCH₂Br (preparation each given) to give, after hydrogenation, title compound I.

IC ICM A61K031-18

ICS A61K031-22; A61K031-275; A61K031-38

INCL 514605000

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1

IT Digestive tract

(disease, treatment; preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β₃ adrenoceptor agonists)IT Antidiabetic agents(preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β₃ adrenoceptor agonists)IT Antiobesity agents(treatment; preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β₃ adrenoceptor agonists)

IT Adrenoceptors

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(β₃, mediated disorders; treatment; preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β₃ adrenoceptor agonists)

IT 2065-04-5P, 2-Bromo-1-(3-methylsulfonylaminophenyl)ethanone 2417-42-7P,
 1-(3-Methylsulfonylaminophenyl)ethanone 3141-93-3P, 1-(3,4-Dimethoxyphenyl)2-phenylethanone 3864-15-1P, α-(3,4-Dimethoxyphenyl)benzeneethanol 4837-20-1P, 4-Difluoromethoxybenzoic acid 6275-09-8P, α-(3,4-Dimethoxyphenyl)benzeneethanamine hydrochloride 6322-56-1P, 1-(4-Hydroxy-3-nitrophenyl)ethanone 10133-22-9P
10133-30-9P, Benzo[b]thiophene-5-carboxaldehyde 14347-05-8P
14347-08-1P 14347-14-9P, 1-(3-Amino-4-hydroxyphenyl)ethanone hydrochloride 14347-15-0P 14347-18-3P 14347-24-1P 14347-25-2P
17554-34-6P 20532-34-7P, 5-Hydroxymethylbenzo[b]thiophene 22955-07-3P, 4-Phenylmethoxy-3-nitrobenzaldehyde 26218-80-4P, Methyl 6-methoxynicotinate 31352-40-6P, 4,4'-Bis(bromomethyl)benzophenone 50685-26-2P, 4-Cyanomethylbenzoic acid 58584-63-7P, 6-Methoxy-3-pyridinemethanol 62596-18-3P 63720-40-1P, α-(3-Methoxyphenyl)benzeneethanamine 65614-75-7P, 1-(3,4-Dimethylphenyl)-2-phenylethanone 78306-98-6P 80235-73-0P 80235-75-2P, α-(3,4-Dimethoxyphenyl)benzeneethanamine 90021-26-4P, 4,4'-Bis(methoxymethyl)benzophenone 92907-92-1P 97914-54-0P, Methyl 4-Difluoromethoxybenzoate 98466-44-5P, Methyl α-cyano-3,4-dimethoxybenzeneacetate 118237-03-9P, α-Phenyl-α-trifluoromethylbenzeneethanamine 126748-44-5P 160059-10-9P,

α - (4-Methylthiophenyl)benzeneethanol 169273-94-3P 170687-69-1P
 170687-70-4P, α - (4-Methylsulfonylphenyl)benzeneethanol
 170687-73-7P, Methyl α -aminomethyl-3,4-dimethoxybenzeneacetate
 170687-74-8P 170687-75-9P 170687-76-0P 170687-77-1P 170687-78-2P,
 α -Aminomethyl-N,N-dimethylbenzeneacetamide 170687-79-3P
 170687-81-7P 170687-82-8P 170687-83-9P 170687-84-0P 170687-85-1P
 170687-87-3P 170687-88-4P, 6-Amino-7-phenyl-1-heptanol 170687-94-2P
 170687-95-3P 170687-96-4P 170688-00-3P 170688-01-4P 170688-06-9P
 170688-07-0P 170688-08-1P 170688-17-2P 170688-28-5P 170688-39-8P
 170688-40-1P 170688-47-8P 170688-49-0P 170688-53-6P 170688-80-9P
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 170688-93-4P 170688-94-5P 170688-95-6P 170689-00-6P 170689-09-5P
 209915-18-4P 209915-20-8P 209915-21-9P 209915-22-0P 209915-23-1P
 209915-24-2P 209915-25-3P 209915-26-4P 209915-27-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β_3 adrenoceptor agonists)

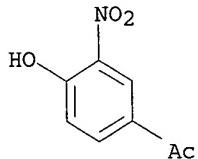
IT 6322-56-1P, 1-(4-Hydroxy-3-nitrophenyl)ethanone

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-[3-(2-aralkylamino-1-hydroxyethyl)phenyl]methanesulfonamides and analogs as β_3 adrenoceptor agonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 3 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 8
 ACCESSION NUMBER: 1998:427778 HCPLUS
 DOCUMENT NUMBER: 129:81960
 TITLE: Preparation of catecholamine surrogates as β_3 adrenergic receptor agonists
 INVENTOR(S): Cheng, Peter T. W.; Bisacchi, Gregory S.; Gavai, Ashvinikumar V.; Poss, Kathleen M.; Ryono, Denis E.; Sher, Philip M.; Sun, Chong-qing; Washburn, William N.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
 SOURCE: U.S., 16 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
US 5770615	A	19980623	US 1997-825309	19970328 <--

PRIORITY APPLN. INFO.:

US 1997-825309

19970328 <--

OTHER SOURCE(S): MARPAT 129:81960

ED Entered STN: 11 Jul 1998

AB Catecholamine surrogates I [R1 = alkyl, aryl, arylalkyl; R2 = H, OH, hydroxymethyl, halo; R3 = H, alkyl; R4, R14 = H, alkoxy, alkoxyethyl, OH, cyano, CONR₆R₁₆, CO₂R₆, NR₆R₁₆, NR₆COR₈, NR₆SO₂R₁; R4, R14 together with the carbon atoms to which they are bonded form heterocycle; R5, R15, R25 = independently A or B; A = H, alkyl, cycloalkyl, halo, OH, aryl, alkoxy, cyano, SR₇, S(O)R₇, SO₂R₇, NR₆R₁₆, NR₆COR₈, OCH₂CONR₆R₁₆, OCH₂CO₂R₆, CONR₆R₁₆, CO₂R₆; B = (CH₂)_nNR₆R₁₆, (CH₂)_mPO(OR₆)OR₁₆, (CH₂)_nNR₆COR₈, O-aryl, OCH₂CH₂NR₆R₁₆, COR₇, SO₂NR₆R₁₆, NR₆CO₂R₇, NR₆CONR₆R₁₆, heterocycle; R5, R15 together with the carbon atoms to which they are bonded form heterocycle; provided that at least one of R5, R15, and R25 = B; R6, R16 = H, alkyl; R7 = alkyl; R8 = H, alkyl, aryl, arylalkyl; m = 0-6; n = 1-6] and pharmaceutically acceptable salts thereof, are β_3 adrenergic receptor agonists and are useful, therefore for example, in the treatment of diabetes, obesity, and gastrointestinal diseases. Thus, alkylation of α -Me amino ester II (preparation given) with iodide III (preparation given), followed by saponification, amidation with di-Et 4-aminobenzylphosphonate, and desilylation gave desired catecholamine surrogate IV.

IC ICM A61K031-425

ICS A61K031-165; C07D277-28; C07C321-00

INCL 514365000

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 63IT Antidiabetic agentsAntibesity agents(preparation of catecholamine surrogates as β_3 adrenergic receptor agonists)

IT 98-18-0P, 3-Aminosulfonylaniline 123-30-8P 2015-19-2P 6274-18-6P
6322-56-1P 14347-05-8P 14347-08-1P 14347-15-0P 14347-25-2P
22927-78-2P 27958-77-6P, 3-[(Dimethylamino)methyl]aniline 35582-08-2P
62345-76-0P, 4-[2-(Dimethylamino)ethoxy]aniline 62882-11-5P
104139-11-9P, Diethyl 3-aminobenzylphosphonate 170687-75-9P
170687-82-8P 170689-16-4P 181513-08-6P 184097-39-0P 193017-26-4P
197643-97-3P 197643-98-4P 197643-99-5P 197644-01-2P 197644-02-3P
197644-03-4P 197644-04-5P 197644-05-6P 197644-06-7P 197644-07-8P
197644-10-3P 197644-11-4P 197644-13-6P 197644-14-7P 197644-15-8P
209405-51-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

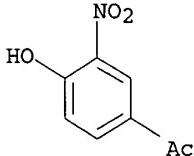
(preparation of catecholamine surrogates as β_3 adrenergic receptor agonists)IT 6322-56-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of catecholamine surrogates as β_3 adrenergic receptor agonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 4 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:412938 HCAPLUS
 DOCUMENT NUMBER: 140:423692
 TITLE: Pyridine and pyrimidine derivatives and their compositions, useful as inhibitors of JAK and other protein kinases
 INVENTOR(S): Bethiel, Randy S.; Moon, Young Choon
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA
 SOURCE: PCT Int. Appl., 104 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041810	A1	20040521	WO 2003-US35188	20031105 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2507406	AA	20040521	CA 2003-2507406	20031105 <--
AU 2003286895	A1	20040607	AU 2003-286895	20031105 <--
US 2004176271	A1	20040909	US 2003-702113	20031105 <--
EP 1560824	A1	20050810	EP 2003-778111	20031105 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006508107	T2	20060309	JP 2004-550489	20031105 <--
PRIORITY APPLN. INFO.:			US 2002-424043P	P 20021105 <--
			WO 2003-US35188	W 20031105

OTHER SOURCE(S): MARPAT 140:423692

ED Entered STN: 21 May 2004

AB The invention provides compds. of formula I or pharmaceutically acceptable salts thereof. The invention also provides pharmaceutically acceptable compns. comprising I, and methods of utilizing I and their compns. in the treatment of various protein kinase-mediated disorders. In compds. I, R1 is Q-Arl; Q is a bond or C1-2 alkylidene chain wherein one methylene unit is optionally replaced by O, NR, NRCO, NRCONR, NRCO2, CO, CO2, CONR,

OC(O)NR, SO₂, SO₂NR, NRSO₂, NRSO₂NR, C(O)C(O), or C(O)CH₂C(O); R is H or (un)substituted aliphatic; Ar₁ is (un)substituted, (poly)(un)saturated, 5- to 7-membered monocyclic ring having 0-3 N/O/S heteroatoms, or 8- to 12-membered bicyclic ring system having 0-5 N/O/S heteroatoms; Z₁ is N or CH; Z₇ is N or CURy; T, U are bond or (un)saturated C1-6 alkylidene chain, wherein up to two methylene units of the chain are optionally and independently replaced by CO, CO₂, COCO, CONR, OCONR, NRNR, NRNRCO, NRCO, NRCO₂, NRCONR, SO, SO₂, NRSO₂, SO₂NR, NRSO₂NR, O, S, or NR; Rx, Ry are independently halogen, CN, NO₂, or R'; Z₂, Z₅, and Z₆ are independently N or CH, provided that no more than 2 of them are N; Z₃ is CR₃; Z₄ is CR₄; wherein one of R₃ and R₄ is Ru and the other is OR'; Ru is (CH₂)_tCN, (CH₂)_tNO₂, (CH₂)_tNR₂, (CH₂)_tNRCOR, (CH₂)_tCONR₂, (CH₂)_tCO₂R, (CH₂)_tAr₂, etc.; t is 0-2; Ar₂ is an (un)substituted, (poly)(un)saturated 5- to 7-membered, monocyclic ring having 0-3 N/O/S heteroatoms; and R' is H, (un)substituted aliphatic or (bi)(hetero)cyclic. Approx. 190 compds. I are claimed individually. A general multi-step preparation is described in examples, including step combinations and final product mol. wts. for approx. 30 invention compds., including II. In a JAK3 inhibition assay, several invention compds. had Ki values less than 0.1 μM. Similar potencies were obtained for some compds. against CDK2, JNK3, SYK, and GSK-3.

IC ICM C07D403-10

ICS C07D239-42; C07D405-12; C07D213-74; A61K031-505

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 63

IT 62-53-3D, Aniline, derivs. 98-95-3D, Nitrobenzene, derivs. 420-04-2,

Cyanamide 4637-24-5 5815-08-7, Bredereck's reagent 6322-56-1D

, 4-Hydroxy-3-nitroacetophenone, derivs. 13110-96-8D,

4-Hydroxy-3-carboxyacetophenone, derivs. 26518-71-8,

6-Acetyl-2H-1,4-benzoxazin-3(4H)-one

RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation of pyridine and pyrimidine derivs. as inhibitors of JAK and other protein kinases)

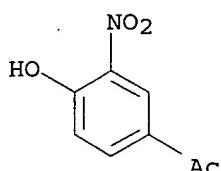
IT 6322-56-1D, 4-Hydroxy-3-nitroacetophenone, derivs.

RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation of pyridine and pyrimidine derivs. as inhibitors of JAK and other protein kinases)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 5 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:390239 HCPLUS

DOCUMENT NUMBER: 140:406743

TITLE: Preparation of aryl and heteroaryl amides, in particular benzamides and pyridinyl amides, as apolipoprotein B (Apo B) secretion inhibitors

INVENTOR(S): Inoue, Yoshikazu; Terasawa, Takeshi; Takasugi,

PATENT ASSIGNEE(S): Hisashi; Nagayoshi, Akira; Ueshima, Koji; Sawada, Masae; Furukawa, Yoshiro; Mikami, Masafumi; Hinoue, Kazumasa; Fukumoto, Daisuke Fujisawa Pharmaceutical Co., Ltd., Japan; Daiso Co., Ltd.; et al.

SOURCE: PCT Int. Appl., 331 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039795	A2	20040513	WO 2003-JP13683	20031027 <--
WO 2004039795	A3	20050324		
			W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
AU 2003274753	A1	20040525	AU 2003-274753	20031027 <--
US 2004133008	A1	20040708	US 2003-694091	20031028 <--
PRIORITY APPLN. INFO.:			AU 2002-952331	A 20021029 <--
			AU 2003-902622	A 20030527
			WO 2003-JP13683	W 20031027

OTHER SOURCE(S): MARPAT 140:406743

ED Entered STN: 13 May 2004

AB Title compds. I [wherein R1 = H, lower alk/en/yl, halo(lower)alkyl, cyclo(lower)alkyl, lower alkoxy, lower alkylthio, acyl, NH2 and derivs., (un)substituted aryl; R2 = H, (un)substituted hetero/aryl; X = a bond or bivalent residue derived from piperazine; Y is -(A1)n-(A2)m-; A1 = O, NH, CO, NHCO, CONH, CH2CONH, etc.; A2 = (un)substituted lower alkylene, n and m = independently 0 or 1; A = bivalent residue derived from hetero/arene; B = bivalent residue derived from (un)substituted hetero/arene; and their salts] were prepared as inhibitors of apolipoprotein B (Apo B) secretion, and as a medicament for prophylactic and treatment of diseases or conditions resulting from elevated circulating levels of Apo B. For example, II was prepared by acylation of N-(2,3-dihydro-1H-indol-5-yl)-6-methyl-2-(1-piperidinyl)nicotinamide (preparation given) with 2-pyridinyl acetic acid dihydrochloride. N-[4-[(2-(6-Amino-2-pyridinyl)ethyl)amino]phenyl]-4-chloro-2-(dimethylamino)benzamide (III) displayed 85.9% inhibition of Apo B secretion at 10-8 M.. III, at a dose of 0.32 mg/kg lowered lipid levels in ddY-mice by 52% after 2 h. I are useful as hypolipemic, antidiabetic, and cardiovascular agents.

IC ICM C07D401-12
ICS C07D401-14; C07D213-56; C07D213-38; C07D213-82; C07D213-30; C07D213-74; C07D213-40; C07D213-81; C07D231-12; C07D249-08; C07D277-40; C07D213-75; C07D417-12; C07D403-12; C07D417-14; C07D213-73; C07D217-22; C07D207-32; C07D403-04

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 63

ST amide prepn apolipoprotein B secretion inhibitor hypolipemic
antidiabetic cardiovascular; pyridine amide prepn apolipoprotein B
secretion inhibitor diabetes hyperlipidemia

IT **Diabetes mellitus**
(non-insulin-dependent; preparation of amides as apolipoprotein B secretion
inhibitors)

IT Anticholesteremic agents

Antidiabetic agents

Antiobesity agents

Atherosclerosis

Cardiovascular agents

Human

Hypercholesterolemia

Hypertriglyceridemia

Hypolipemic agents

Obesity

(preparation of amides as apolipoprotein B secretion inhibitors)

IT 75-33-2, 2-Propanethiol 76-83-5, Trityl chloride 94-09-7, Ethyl
4-aminobenzoate 100-01-6, 4-Nitroaniline, reactions 103-74-2,
2-(2-Hydroxyethyl)pyridine 105-07-7, 4-Formylbenzonitrile 109-01-3,
1-Methylpiperazine 110-13-4, 2,5-Hexanedione 110-89-4, Piperidine,
reactions 110-91-8, Morpholine, reactions 111-49-9 122-04-3,
4-Nitrobenzoyl chloride 123-75-1, Pyrrolidine, reactions 123-90-0,
Thiomorpholine 288-13-1, Pyrazole 288-32-4, Imidazole, reactions
350-46-9, 4-Fluoronitrobenzene 504-29-0, 2-Aminopyridine 579-75-9,
2-Methoxybenzoic acid 610-14-0, 2-Nitrobenzoyl chloride 610-16-2,
2-(Dimethylamino)benzoic acid 626-58-4, 4-Methylpiperidine 637-59-2,
(3-Bromopropyl)benzene 683-60-3, Sodium isopropoxide 704-45-0,
2-Methoxy-4-methylbenzoic acid 1003-29-8, Pyrrole-2-carboxaldehyde
1089-06-1, 2-(Phenylacetyl)-5-isoindolinamine 1824-81-3,
6-Methyl-2-pyridinamine 2305-36-4, 2-Amino-4-methylbenzoic acid
2706-56-1, 2-(2-Pyridinyl)ethylamine 2942-59-8, 2-Chloronicotinic acid
3383-72-0, 1-(2-Chloroethoxy)-4-nitrobenzene 4045-30-1,
4,4-Dimethylpiperidine 4548-45-2, 2-Chloro-5-nitropyridine 5653-40-7,
2-Amino-4,5-dimethoxybenzoic acid 5900-58-3, Methyl 4-chloro-2-
aminobenzoate 6314-23-4, 2-(1H-Pyrazol-1-yl)ethanol 6322-56-1,
4-Acetyl-2-nitrophenol 16034-48-3,
1H-Pyrazol-1-ylacetic acid 16179-97-8, 2-Pyridylacetic acid
dihydrochloride 21732-17-2, 1H-Tetrazol-1-ylacetic acid 30529-70-5,
2-Chloro-6-methylnicotinic acid 32692-19-6, 5-Nitroindoline
37460-75-6, 2-Isopropyl-4-methylbenzoic acid 39853-81-1,
2-Chloro-6-methylnicotinoyl chloride 41253-21-8, 1,2,4-Triazole sodium
salt 42088-91-5, [1-(2-Pyridinyl)ethyl]amine 42093-97-0,
2-(1-Piperidinyl)benzoic acid 53135-24-3, Ethyl 2-methyl-6-oxo-1,6-
dihydro-5-pyrimidinecarboxylate 57381-51-8, 4-Chloro-2-
fluorobenzonitrile 58498-12-7, 4-(2-Pyridinylmethyl)aniline
63635-26-7, 2-Isopropoxybenzoic acid 73616-27-0, 2-(5-Amino-1H-pyrazol-1-
yl)ethanol 75890-68-5, [2-(Formylamino)-1,3-thiazol-4-yl]acetic acid
78648-27-8, 2-(1-Pyrrolidinyl)benzoic acid 84392-17-6,
4'-(Trifluoromethyl)[1,1'-biphenyl]-2-carboxylic acid 84392-24-5,
4'-Ethyl-1,1'-biphenyl-2-carboxylic acid 85006-31-1, Methyl
3-amino-4-methyl-2-thiophenecarboxylate 88709-18-6, 2-Ethoxy-4-
methylbenzoic acid 94610-82-9, 2-Fluoro-4-methoxybenzonitrile
118449-67-5, 2-(4-Methylphenyl)-1-cyclohexene-1-carboxylic acid
129487-92-9, tert-Butyl 5-amino-1-indolinecarboxylate 146070-34-0,
2-Fluoro-4-(trifluoromethyl)benzonitrile 146070-35-1,
2-Fluoro-3-(trifluoromethyl)benzonitrile 157921-38-5,

4'-(Dimethylamino)-1,1'-biphenyl-2-carboxylic acid 163009-16-3,
 (1-Trityl-1H-1,2,4-triazol-3-yl)methyl methanesulfonate 164148-92-9,
 tert-Butyl 6-amino-3,4-dihydro-2(1H)-isoquinolinecarboxylate
 180340-74-3, 4'-(Trifluoromethyl)-1,1'-biphenyl-2-carbonyl chloride
 186390-79-4, tert-Butyl 6-nitro-3,4-dihydro-2(1H)-isoquinolinecarboxylate
 191104-16-2, Methyl 4-methyl-2-[(trifluoromethanesulfonyl)oxy]benzoate
 212892-02-9, Methyl 4-chloro-2-[(trifluoromethyl)sulfonyl]oxy]benzoate
 273727-27-8, 3-[[4-(4-Aminophenyl)-1-piperazinyl]methyl]benzonitrile
 343355-98-6, 2-(4-Methyl-1-piperidinyl)benzoic acid 344561-49-5,
 4-[2-(2-Pyridinyl)ethoxy]phenylamine 361550-33-6, N-[2-(2-Pyridinyl)ethyl]-2,5-pyridinediamine 381706-53-2, 3-[[4-(5-Amino-2-pyridinyl)-1-piperazinyl]methyl]benzonitrile 400727-71-1,
 2-(1H-Pyrazol-1-ylacetyl)-5-isoindolinamine 408365-24-2,
 1-(4-Aminophenyl)-3-(2-pyridinyl)propan-1-one 408365-84-4, tert-Butyl N-(4-aminophenyl)[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]carbamate 408365-92-4, tert-Butyl N-(4-aminophenyl)[2-[(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl carbamate 408367-22-6,
 [6-[(tert-Butoxycarbonyl)amino]-2-pyridinyl]acetic acid 408369-33-5,
 N-(4-Aminophenyl)-N-[2-(2-pyridinyl)ethyl]formamide 474519-72-7,
 1-[2-(2-Pyridinyl)ethyl]-5-indolinamine 474519-88-5,
 N-(2,3-Dihydro-1H-indol-5-yl)-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 474520-50-8, 1-Acetyl-2,3-dihydro-1H-indol-5-ylamine 537713-11-4, 2-(4-Aminophenyl)-N-(2-pyridinyl)acetamide 537713-66-9,
 N-(4-Aminophenyl)-2-(2-pyridinyl)acetamide 537714-00-4, tert-Butyl [6-[2-(4-aminophenyl)amino]ethyl]-2-pyridinyl carbamate 537714-05-9,
 tert-Butyl [6-[2-(4-aminophenoxy)ethyl]-2-pyridinyl]carbamate 537714-52-6, tert-Butyl [4-[(2-(4-aminophenoxy)ethyl)-1,3-thiazol-2-yl]carbamate 537715-07-4, N-[2-(6-Amino-3,4-dihydroisoquinolin-2(1H)-yl)ethyl]acetamide 537715-50-7, N-(4-Aminophenyl)-2-[6-(2,5-dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetamide 537717-32-1, 6-Amino-2-[2-(2-pyridinyl)ethyl]-1-isoindolinone 689139-77-3, 2-(3,6-Dihydro-1(2H)-pyridinyl)benzoic acid 689140-29-2, Benzyl 4-methyl-2-[(trifluoromethanesulfonyl)oxy]benzoate 689142-35-6, Benzyl 5-methyl-2-[(trifluoromethanesulfonyl)oxy]benzoate 689145-43-5,
 tert-Butyl N-[4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]aminophenyl][2-(2-pyridinyl)ethyl]carbamate 689146-66-5, N-[4-[(2-Pyridinyl)ethoxy]phenyl]nicotinamide 689149-70-0, Benzyl 4-methoxy-2-[(trifluoromethyl)sulfonyl]oxy]benzoate 689150-60-5 689153-19-3, N-(2-Chloroethyl)-4-nitroaniline hydrochloride 689159-05-5, 2-(2-Pyridinylacetyl)-5-isoindolinamine 689160-28-9,
 1-(1H-Pyrazol-1-ylacetyl)-5-indolinamine 689161-17-9,
 2-Isopropoxy-4-methylbenzoic acid 689161-75-9, 4-Chloro-2-isopropoxybenzoic acid 689172-01-8, 1-(1H-1,2,4-Triazol-1-ylacetyl)-5-indolinamine 689179-98-4, N-[2-[3-(Trityl amino)-1H-pyrazol-1-yl]ethyl]-1,4-benzenediamine 689180-18-5, 1-(2-Aminoethyl)-N-trityl-1H-pyrazol-3-amine

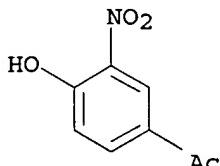
RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of amides as apolipoprotein B secretion inhibitors)

IT 6322-56-1, 4-Acetyl-2-nitrophenol

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of amides as apolipoprotein B secretion inhibitors)

RN 6322-56-1 HCAPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)-(9CI) (CA INDEX NAME)



L130 ANSWER 6 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:633679 HCAPLUS

DOCUMENT NUMBER: 139:180055

TITLE: Preparation of benzoxazoline derivatives as catechol bioisosteres

INVENTOR(S): Gazit, Aviv; Levitzki, Alexander; Blum, Galia

PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew University of Jerusalem, Israel

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066608	A1	20030814	WO 2003-IL94	20030205 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003206109	A1	20030902	AU 2003-206109	20030205 <--
EP 1472237	A1	20041103	EP 2003-702993	20030205 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005526026	T2	20050902	JP 2003-565982	20030205 <--
US 2005143430	A1	20050630	US 2004-914010	20040805 <--
PRIORITY APPLN. INFO.:			US 2002-354153P	P 20020206 <--
			WO 2003-IL94	W 20030205

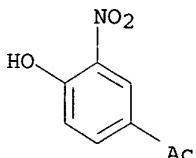
OTHER SOURCE(S): MARPAT 139:180055

ED Entered STN: 15 Aug 2003

AB The present invention provides catechol bioisostere compds. (I) [X and Y are independently NR₁ or O, wherein R₁ is H or alkyl; A is a group represented by the formula -COC(CN):CH-B, CH:C(CN)Me; wherein B is Ph which is unsubstituted or substituted by one or more OR₂ or CO₂R₃ (wherein R₂ and R₃ are independently hydrogen or alkyl), or B is a group represented by the formula Q (wherein X₁ and Y₁ are independently NR₁ or O, wherein R₁ is H or alkyl); D is cyano or C(O)R₄ (wherein R₄ is an alkyl, aralkyl or aryl which is unsubstituted or substituted by one or more OR₅, wherein R₅ is hydrogen or alkyl; or C(O)NR₆R₇; wherein R₆ and R₇

are independently hydrogen or an optionally substituted alkyl, aralkyl or aryl) which are potent inhibitors of protein tyrosine kinases (PTKs). The present invention further provides methods of inhibiting PTKs, for example receptor protein tyrosine kinases (RTKs), comprising administering the catechol bioisosteres. The catechol bioisostere compds. I are useful in treating or preventing PTK-related disease states, particularly protein tyrosine kinase related disorders which are associated with defects in signaling pathways mediated by PTKs. Thus, 20 mg 3-(2-oxobenzoxazolin-6-yl)-3-oxopropanenitrile, 13.6 mg 3,4-dihydroxybenzaldehyde, and 1.22 mg β-alanine in 10 mL ethanol were refluxed for 4.5 h, evaporated, and purified by HPLC using a semipreparative RP18 column to give 3-(3,4-dihydroxyphenyl)-2-(2-oxobenzoxazolin-6-ylcarbonyl)acrylonitrile (II) and its isomer in 38 and 5%, resp. II and 2-(3,4-dihydroxybenzoyl)-3-(2-oxobenzoxazolin-5-yl)acrylonitrile *vitro* showed IC₅₀ of 1.2 μM and 70 nM for inhibiting an insulin-like growth factor 1 receptor (IGF-IR).

- IC ICM C07D263-54
 ICS A61K031-423
 CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 7
 IT 5698-74-8P, Benzoxazoline **6322-56-1P**, 4-Hydroxy-3-nitroacetophenone 54209-84-6P 54255-50-4P 54903-09-2P,
 6-Acetylbenzoxazolin-2-one 54903-15-0P 58820-00-1P 79851-84-6P
 581102-26-3P 581102-27-4P 581102-28-5P 581102-29-6P,
 2-(3-Hydroxy-4-nitrophenyl)-5,5-dimethyl-1,3-dioxane 581102-30-9P,
 2-(4-Amino-3-hydroxyphenyl)-5,5-dimethyl-1,3-dioxane 581102-32-1P,
 2-(4-Hydroxy-3-nitrophenyl)-5,5-dimethyl-1,3-dioxane 581102-33-2P,
 2-(3-Amino-4-hydroxyphenyl)-5,5-dimethyl-1,3-dioxane 581102-34-3P,
 (5-Formyl-2-hydroxyphenyl)carbamic acid phenyl ester
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of benzoxazoline derivs. as catechol bioisosteres and tyrosine
 kinase inhibitors)
 IT **6322-56-1P**, 4-Hydroxy-3-nitroacetophenone
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of benzoxazoline derivs. as catechol bioisosteres and tyrosine
 kinase inhibitors)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 7 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:571107 HCPLUS
 DOCUMENT NUMBER: 139:133557
 TITLE: Preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of

nuclear receptors with therapeutic uses

INVENTOR(S): Martin, Richard; Flatt, Brenton Todd; Wang, Tie-Lin;
Kahl, Jeffery Dean

PATENT ASSIGNEE(S): X-Ceptor Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 481 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003060078	A2	20030724	WO 2002-US41224	20021220 <--
WO 2003060078	C2	20040219		
WO 2003060078	C1	20040429		
WO 2003060078	A3	20040624		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002367060	A1	20030730	AU 2002-367060	20021220 <--
US 2003212111	A1	20031113	US 2002-329668	20021220 <--
US 6696473	B2	20040224		
EP 1465882	A2	20041013	EP 2002-806505	20021220 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2004180942	A1	20040916	US 2003-717049	20031118 <--
US 7115640	B2	20061003		
PRIORITY APPLN. INFO.:			US 2001-342720P	P 20011221 <--
			US 2002-329668	A1 20021220 <--
			WO 2002-US41224	W 20021220 <--

OTHER SOURCE(S): MARPAT 139:133557

ED Entered STN: 25 Jul 2003

AB Phenylimino thiazolylidene thiazolidinones and other heterocyclic compds.
(shown as I or its E/Z isomer; variables defined below; e.g.
3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxothiazolidin-4-one
(shown as II)), compns. and methods for modulating the activity of nuclear
receptors are provided. In particular, heterocyclic compds. are provided
for modulating the activity of farnesoid X receptor (FXR), liver X
receptor (LXR) and/or orphan nuclear receptors. FXR agonism properties of
>200 examples of I are tabulated. For I, X1, X2 and X3 = (i) or (ii) as
follows: (i) X1, X2 and X3 = S, O or NR5; or (ii) X1 is -CR8:CR9- (R8 and
R9 = H, (un)substituted alkyl, (un)substituted alkenyl, etc.) and X2 and
X3 = S, O or NR5. R1 is (un)substituted alkyl; R2 is (un)substituted
aralkyl, aryl, alkenyl, alkyl, cycloalkyl, heteroaralkyl, or
heterocyclalkyl; R3 is (un)substituted heteroaryl, aryl, or aralkyl. A
and G = (i), (ii) or (iii) as follows: (i) A and G = H, (un)substituted
aryl, (un)substituted alkyl, (un)substituted alkoxycarbonyl,
hydroxycarbonyl, and (un)substituted alkylcarbonyl; or (ii) A and G
together form (un)substituted alkylene or azaalkylene; or (iii) A and G

together form substituted butadienyl; D and E are each H, or together form a bond; addnl. details including provisos are given in the claims. Although the methods of preparation are not claimed, .apprx.290 example preps. are included.

- IC ICM C12N
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s) : 1
IT Steroid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(LXR (liver X receptor); preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Skin, disease
(acneiform; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Antiarteriosclerotics
(antiatherosclerotics; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Biliary tract, disease
(cholestasis; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Mucous membrane
(disease, disturbed differentiation or excess proliferation; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Nuclear receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(farnesoid X and orphan, modulators; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Disease, animal
(mucous membrane, disturbed differentiation or excess proliferation; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Artery, disease
(peripheral, occlusion; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Skin, disease
(perturbed epidermal barrier function and disturbed differentiation or excess proliferation of epidermis; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
IT Alzheimer's disease
Anti-Alzheimer's agents
Anti-inflammatory agents
Anticholesteremic agents
Antidiabetic agents
Antiobesity agents
Antiparkinsonian agents
Antitumor agents
Atherosclerosis
Calculi, biliary

Cardiovascular agents

Cardiovascular system, disease

Diabetes mellitus

Human

Hypercholesterolemia

Hyperglycemia

Hypertriglyceridemia

Hypolipemic agents

Immune disease

Immunomodulators

Inflammation

Lipodystrophy

Neoplasm

Obesity

Parkinson's disease

(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Dyslipidemia

Hyperlipidemia

Hyperlipoproteinemia

Lipid metabolism disorders

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Brain, disease

(stroke; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Acne

(vulgaris; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 304445-33-8P, 3-[[3-Benzyl-5-(3-methyl-5-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
 562825-02-9P, 2-[(4-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-18-7P,
 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-55-2P,
 3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-57-4P,
 3-[[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562826-21-5P,
 4-Ethylamino-3-[[3-(3-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-49-7P,
 N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2,2,2-trifluoroacetamide
 562826-64-6P, N-[3-[[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-83-9P, Acetic acid
 [[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]carbamoyl]methyl ester 562827-12-7P,
 Methyl 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate
 562827-15-0P, 3-[[3-Benzyl-5-(1-methyl-4,5,6,7-tetrahydro-1H-thiazolo[5,4-c]pyridin-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-

ethylaminobenzonitrile 562827-17-2P, Methyl 3-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate 562827-26-3P, 3-[3'-Benzyl-4-(2-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-37-6P, 3'-Benzyl-2'-[(5-cyano-2-ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-[2,5']bithiazolyldene-4-carboxylic acid ethyl ester 562827-57-0P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyldien-4'-one 562827-65-0P, [2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyldien-3-yl]acetic acid methyl ester 562827-70-7P, 2-[2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyldien-3-yl]ethyl acetate 562827-80-9P, 3-[[3-Benzyl-5-(6-ethoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-84-3P, 3-[[3-Benzyl-5-(6-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-96-7P, 3-[[3-Benzyl-5-(6-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-06-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoroacetamide 562828-07-3P, 3-[[5-(6-Amino-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-08-4P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N',N''-di(tert-butoxycarbonyl)guanidine 562828-14-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-2,2,2-trifluoro-N-[2-(morpholin-4-yl)ethyl]acetamide 562828-22-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N-(3-cyanopropyl)-2,2,2-trifluoroacetamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of phenylimino thiazolyldene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 300361-31-3P, 3-Allyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 300716-97-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 304445-27-0P, 4-Ethylamino-3-[[3-ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 304445-29-2P, 3-[[3-Allyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 304445-31-6P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-phenylthiazolidin-2-ylidene]amino]benzonitrile 304447-32-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(naphthalen-1-ylimino)thiazolidin-4-one 304447-69-6P, 3-Benzyl-2-benzylimino-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 306317-03-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one 306317-09-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-phenyliminothiazolidin-4-one 306317-87-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[4-(morpholin-4-yl)phenyl]imino]thiazolidin-4-one 309735-39-5P, 2-[(4-Cyclohexylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-phenylthiazolidin-4-one 337918-67-9P,

3-[[3-Benzyl-5-(5-chloro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 354775-87-4P,
 3-[[3-Cyclohexyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562825-00-7P,
 3-Benzyl-2-[(4-methoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-01-8P, 3-Benzyl-2-[[4-(dimethylamino)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-03-0P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one 562825-04-1P, 2-[(2-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-05-2P,
 3-Benzyl-2-[[4-(benzyloxy)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-06-3P, 3-Benzyl-2-[(2-hydroxynaphth-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-07-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-08-5P,
 3-Benzyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-09-6P,
 3-Benzyl-2-[(2-ethylamino-5-nitrophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-10-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[3-(trifluoromethyl)phenyl]imino]thiazolidin-4-one 562825-11-0P, 2-[(3-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-12-1P,
 3-Benzyl-2-[(3-chlorophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-13-2P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(2-propylphenyl)imino]thiazolidin-4-one 562825-14-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-15-4P, 3-Benzyl-2-[(2-ethoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-16-5P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562825-17-6P,
 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide 562825-19-8P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-3-ylimino)thiazolidin-4-one 562825-20-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethoxyphenyl]acetamide 562825-21-2P,
 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-4-ylimino)thiazolidin-4-one 562825-22-3P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-23-4P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(4-(trifluoromethoxy)phenyl)imino]thiazolidin-4-one 562825-24-5P, 3-Benzyl-2-(1H-indazol-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-25-6P,
 3-Benzyl-2-[(4-(imidazol-1-yl)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-26-7P, 2-(Benz[1,3]dioxol-5-ylimino)-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-27-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-28-9P,
 3-Benzyl-2-[[2-(ethylamino)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-29-0P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-30-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-31-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(dimethylamino)benzonitrile 562825-32-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(tert-

butylamino)benzonitrile 562825-33-6P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2,2,2-trifluoroethyl)amino]benzonitrile 562825-34-7P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(piperidin-1-yl)benzonitrile 562825-36-9P, 3-[3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-37-0P, 4-(Dimethylamino)-3-[3-ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-38-1P, 3-[3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-40-5P, 3-[3-Butyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-45-0P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)phenyl]acetamide 562825-46-1P, 2'-(5-Acetyl-2-(ethylamino)phenyl)imino]-3'-benzyl-3-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyldien-4'-one 562825-48-3P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-(ethylamino)benzonitrile 562825-49-4P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)phenyl]acetamide 562825-50-7P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-[2,5']bithiazolidinyliden-2'-ylideneamino)phenyl]acetamide 562825-53-0P, 3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-(ethylamino)benzonitrile 562825-54-1P, 3-[3-Benzyl-5-[3-methyl-5-(trifluoromethyl)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-56-3P, Dimethylcarbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562825-58-5P, 3-[3-Benzyl-5-[3-methyl-5-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-59-6P, 3-[3-Benzyl-5-(1,3-dimethyl-1,3-dihydrobenzimidazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-60-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-8-ylimino)thiazolidin-4-one 562825-61-0P, 3-Benzyl-2-[(8-hydroxyquinolin-5-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-62-1P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-butylaminobenzonitrile 562825-63-2P, 4-Benzylamino-3-[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-64-3P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyclopentylaminobenzonitrile 562825-65-4P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-ylamino)benzonitrile 562825-66-5P, 3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-yl)benzonitrile 562825-67-6P, 3-Benzyl-2-(isoquinolin-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-68-7P, 3-Benzyl-2-(isoquinolin-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-69-8P, N-[4-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562825-70-1P, 2-[(4-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-71-2P, 4-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide 562825-72-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(naphthalen-2-ylimino)thiazolidin-4-one 562825-73-4P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-2-ylimino)thiazolidin-4-one 562825-74-5P, 4-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamid

e 562825-75-6P, N-Acetyl-4-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamide
562825-77-8P, 2-[(3-Acetylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-78-9P,
N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]pyridin-2-yl]acetamide 562825-79-0P, N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562825-80-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-81-4P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene]amino]benzonitrile 562825-82-5P, 4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-83-6P, 2-[(5-Acetyl-2-methylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-84-7P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2,2,2-trifluoroacetamide 562825-85-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid methyl ester 562825-86-9P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-phenethylthiazolidin-2-ylidene]amino]benzonitrile 562825-87-0P, 2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-90-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid 562825-91-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2-hydroxyethyl)amino]benzonitrile 562825-92-7P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyanophenyl]amino]acetic acid methyl ester 562825-93-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)amino]-N-ethyl-4-ethylaminobenzamide 562825-94-9P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)amino]-4-cyanophenyl]amino]acetic acid 562825-96-1P, 3-Benzyl-2-[(4-(ethylamino)pyridin-3-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-97-2P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-3-ethylaminophenyl]acetamide 562825-98-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2-dimethylamino)ethyl]amino]benzonitrile 562826-00-0P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)amino]-N-ethyl-3-ethylaminobenzamide 562826-03-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)amino]-N-[2-(dimethylamino)ethyl]-4-ethylaminobenzamide 562826-06-6P, 3-Benzyl-2-[[5-(4,5-dihydrooxazol-2-yl)-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-07-7P, 3-[[3-Benzyl-5-(1-methyl-1H-quinolin-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-08-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(1-methyl-1H-quinolin-2-ylidene)thiazolidin-4-one 562826-10-2P, 2-[(3-Acetylphenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-11-3P, N-[4-[[3-Furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-12-4P, [2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]acetic acid methyl ester 562826-13-5P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562826-14-6P,

2-[(5-Acetyl-2-ethoxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-15-7P, 2-[(5-Acetyl-2-hydroxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-18-0P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)imidazolidin-4-one 562826-19-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-[2-(morpholin-4-yl)ethyl]-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-20-4P, 4-Ethylamino-3-[[3-(4-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-22-6P, 4-Ethylamino-3-[[3-(2-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-24-8P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]succinamic acid 562826-25-9P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]benzenesulfonamide 562826-26-0P, Thiophene-2-sulfonic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]amide 562826-27-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-3-methoxybenzamide 562826-28-2P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-29-3P, [3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-30-6P, 3-[[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-1,1-dimethylurea 562826-31-7P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-32-8P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-33-9P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-34-0P, [4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-35-1P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-36-2P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-37-3P, 4-Ethylamino-3-[[3-(3-hydroxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-39-5P, 4-Ethylamino-3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]acetanilide 562826-40-8P, 4-Ethylamino-3-[[3-(3-fluorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-41-9P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(3-trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile 562826-42-0P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(2-trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile 562826-43-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(3-methylbenzyl)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-45-3P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(morpholin-4-yl)acetamide 562826-46-4P, 3-[[3-(3-Chlorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-47-5P, 3-[[3-(3-Bromobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-51-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-

ethylaminophenyl]-2-(dimethylamino)acetamide. 562826-53-3P,
 4-Methylpiperazine-1-carboxylic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]amide 562826-54-4P, 2-[(5-Amino-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-55-5P
 N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(4-methylpiperazin-1-yl)acetamide 562826-57-7P, N-[3-[[3-Benzyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-59-9P, N-[3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-67-9P, N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-69-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-70-4P, N-[3-[[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-71-5P, N-[3-[[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-73-7P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-74-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-75-9P, N-[3-[[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-76-0P, N-[4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-78-2P, N-[3-[[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-79-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-81-7P, N-[3-[[5-[5-[2-(Dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-84-0P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-hydroxyacetamide 562826-85-1P, N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-hydroxyacetamide 562826-86-2P, 2-[(3-Acetylphenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-87-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-89-5P, N-[4-Ethylamino-3-[[3-furan-2-ylmethyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-90-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-91-9P, N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-93-1P, N-[3-[[5-[5-(2-Aminoethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-

(dimethylamino)acetamide 562826-96-4P, 2-(Dimethylamino)-N-[3-[[3-furan-2-ylmethyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-97-5P,
3-(3'-Benzyl-3,4,5-trimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile 562826-98-6P,
3-[3-Benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-99-7P,
3-(3'-Benzyl-4-ethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-00-3P, 3-[3'-Benzyl-3-methyl-4-(4-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-01-4P, 3-[3'-Benzyl-4-(4-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-02-5P, 3-[3'-Benzyl-4-(4-chlorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-03-6P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-p-tolyl-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-04-7P, 3-[3'-Benzyl-4-(4-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-05-8P, 3-(5-Acetyl-3'-benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-06-9P, 3-[3-Benzyl-5-(3-methyl-3,4,5,6-tetrahydropyran-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
562827-07-0P, 3-(3'-Benzyl-3-methyl-4'-oxo-4,5-diphenyl-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-08-1P, 3-(3'-Benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-09-2P, 4-Ethylamino-3-[(5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)amino)-4-oxothiazolidin-3-yl]methylethylbenzoate 562827-13-8P, Methyl 4-[(2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl)methyl]benzoate 562827-14-9P,
4-[(2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl)methyl]benzoic acid 562827-18-3P,
3-[(2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl)methyl]benzoic acid 562827-19-4P,
2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-20-7P,
3-[3'-Benzyl-4-(biphenyl-4-yl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-21-8P, 3-[3'-Benzyl-3-methyl-4-(naphthalen-2-yl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-22-9P, 3-[3'-Benzyl-4-(4-bromophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-23-0P, 3-[3'-Benzyl-3-methyl-4-(2-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-24-1P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562827-27-4P, 3-[3'-Benzyl-4-(3-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-28-5P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-29-6P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethoxyphenyl)-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-30-9P, 3-[3'-Benzyl-4-(2,4-dimethoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile

562827-31-0P, 3-(3'-Benzyl-5-ethyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile
 562827-32-1P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(2-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-33-2P, 3-[3'-Benzyl-4-(3-bromophenyl)-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-34-3P, 3-[3'-Benzyl-4-(3-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-35-4P, 3-Benzyl-2-[[4-(1,1,1,3,3,3-hexafluoro-2-hydroxyisopropyl)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-36-5P, 3-(3'-Benzyl-4-chloromethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-38-7P, 3-(4,3'-Dibenzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-39-8P, 3'-Benzyl-2'-[(5-cyano-2-ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-[2,5']bithiazolylidene-4-carboxylic acid 562827-40-1P, 3-Benzyl-2-[(2-ethylamino-5-(1-hydroxyethyl)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-41-2P, 3-[3'-Benzyl-4-(2-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile
 562827-42-3P, 3-Benzyl-2-[(2-ethylamino-5-[1-(hydroxyimino)ethyl]phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one
 562827-43-4P, 3-Benzyl-2-[(2-ethylamino-5-[1-(methoxyimino)ethyl]phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one
 562827-44-5P, 3-Benzyl-2-[[5-[1-[(benzyloxy)imino]ethyl]-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-45-6P, 3-Benzyl-2-[(2-ethylamino-5-[1-(phenylhydrazone)ethyl]phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-46-7P, 3-(4,3'-Dibenzyl-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-47-8P, 3-[[3-Cyclohexylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-48-9P, 3-[3'-Benzyl-4-(3-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-49-0P, 3-[3'-Benzyl-4-(4-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-50-3P, 3-(3'-Benzyl-3,4-dimethyl-4'-oxo-5-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-51-4P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,5-dimethyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-52-5P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,4-dimethyl-5-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with **therapeutic** uses)

IT 562827-53-6P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(4-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one
 562827-54-7P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-4,3'-dibenzyl-3-methyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-55-8P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(2-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-56-9P, 3-[[3-Benzyl-5-[5-[2-(dimethylamino)acetyl]-1-methyl-4,5,6,7-tetrahydro-1H-

thiazolo[5,4-c]pyridin-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-58-1P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-hydroxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-59-2P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3,3'-dibenzyl-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-60-5P, N-[3-[(3-Benzyl-5-[5-(2-acetoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-61-6P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-methoxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-63-8P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(3-methoxypropyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-67-2P, [2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyliden-3-yl]acetic acid 562827-71-8P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-hydroxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-73-0P, N-[3-(3-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-methoxyacetamide 562827-74-1P, N-[3-(3-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-76-3P, 3-Allyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-77-4P, 3-Cyclohexyl-2-[(2-hydroxynaphthalen-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-78-5P, 3-Allyl-2-(2-hydroxynaphthalen-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-79-6P, 3-[(3-Benzyl-5-(6-fluoro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-81-0P, 4-Ethylamino-3-[(5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-propylthiazolidin-2-ylidene]amino]benzonitrile 562827-82-1P, 3-[(3-Benzyl-5-(3-methyl-6-nitro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-83-2P, N-[2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]acetamide 562827-85-4P, Ethylcarbamic acid 2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-86-5P, [[2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid methyl ester 562827-87-6P, 2-[[2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetamide 562827-88-7P, (2-Chloroethyl)carbamic acid 2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-89-8P, 3-[(3-Benzyl-5-[3-methyl-5-(2-methylaminoethoxy)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-90-1P, 3-[(3-Benzyl-5-[5-(3-hydroxypropoxy)-3-methyl-3H-benzothiazol-2-ylidene]amino)-4-ethylaminobenzonitrile 562827-91-2P, (3-Chloropropyl)carbamic acid 2-[(3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-92-3P, 3-[(3-Benzyl-5-[3-methyl-5-[2-(4-methylpiperazin-1-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-93-4P, 3-[(3-Benzyl-5-[3-methyl-5-[2-(piperidin-1-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-

ylidene]amino]-4-ethylaminobenzonitrile 562827-94-5P,
 3-[[3-Benzyl]-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
 562827-95-6P, [[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid 562827-97-8P, 3-[[3-Benzyl-5-[6-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-98-9P, 3-[[3-Benzyl-5-[3-methyl-6-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-99-0P,
 3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-00-6P,
 3-[[3-Benzyl-5-(3-methyl-4-methoxy-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-01-7P,
 3-[[3-Benzyl-5-(3-methyl-4-methyl-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-02-8P,
 3-[[3-Benzyl-5-(3-methyl-4-chloro-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-03-9P,
 3-[[3-Benzyl-5-(3-methyl-6-trifluoromethoxy-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-04-0P,
 3-[[3-Benzyl-5-(3,5,6-trimethyl-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-05-1P,
 3-[[3-Benzyl-5-(3-methyl-5-acetamido-3H-benzothiazol-2-ylidene)amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-09-5P,
 3-[[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-1,1-dimethylurea
 562828-11-9P, 3-[[5-(5-Amino-3-methyl-3H-benzothiazol-2-ylidene)-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-12-0P,
 [2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]carbamic acid ethyl ester
 562828-13-1P, N-[2-[3-Benzyl-2-[(5-cyano-2-[(ethyl)(2-morpholin-4-ylethyl)amino]phenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-2,2,2-trifluoroacetamide 562828-15-3P,
 3-[[3-Benzyl-5-[3-methyl-6-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-16-4P, 3-[[3-Benzyl-5-[3-methyl-6-[(2-piperidin-1-yl)ethyl]amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-17-5P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoro-N-[2-(morpholin-4-yl)ethyl]acetamide 562828-18-6P, 3-[[3-Benzyl-5-[3-methyl-5-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-19-7P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]guanidine 562828-20-0P,
 3-[[3-Benzyl-5-[3-methyl-6-[(4-trifluoromethylbenzyl)amino]-3H-benzothiazol-2-ylidene]amino]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-21-1P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N-(3-fluoropropyl)-2,2,2-trifluoroacetamide 562828-23-3P, 3-[[3-Benzyl-5-[6-[(3-cyanopropyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-24-4P, 3-[[3-Benzyl-5-[6-[(3-hydroxypropyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-25-5P,
 3-[[3-Benzyl-5-[6-[(2-methoxyethyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile

562828-26-6P, 3-Phenyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-benzyliminothiazolidin-4-one

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 562825-35-8P, 2-[[5-Acetyl-2-(ethylamino)phenyl]imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-41-6P, 3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-42-7P, 3'-Benzyl-3-methyl-4-phenyl-2'-thioxo-2',3'-dihydro-3H-[2,5']bithiazolyldien-4'-one 562825-44-9P, 3'-Benzyl-3-methyl-2'-methylthio-4'-oxo-4-phenyl-3H,4'H-[2,5']bithiazolyldien-3'-ium p-toluenesulfonate 562825-89-2P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid tert-butyl ester 562826-17-9P, 3-Benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxoimidazolidin-4-one

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 62-53-3, Aniline, reactions 70-23-5, Ethyl bromopyruvate 75-31-0, Isopropylamine, reactions 75-64-9, tert-Butylamine, reactions 78-95-5, Chloroacetone 79-44-7, Dimethylcarbamoyl chloride 80-48-8, Methyl p-toluenesulfonate 91-59-8, 2-Naphthylamine 94-70-2, o-Phenetidine 95-54-5, 1,2-Phenylenediamine, reactions 96-32-2, Methyl 2-bromoacetate 98-09-9, Benzenesulfonyl chloride 98-16-8, 3-(Trifluoromethyl)aniline 99-03-6, 3'-Aminoacetophenone 99-09-2, 3-Nitroaniline 99-73-0, 2,4'-Dibromoacetophenone 99-81-0, 2-Bromo-4'-nitroacetophenone 99-92-3, 4'-Aminoacetophenone 99-98-9, N,N-Dimethyl-1,4-phenylenediamine 100-46-9, Benzylamine, reactions 100-63-0, Phenylhydrazine 102-28-3, 3'-Aminoacetonilide 104-94-9 106-50-3, 1,4-Phenylenediamine, reactions 107-10-8, Propylamine, reactions 107-11-9, Allylamine 108-00-9, N,N-Dimethylethylenediamine 108-30-5, Succinic anhydride, reactions 108-42-9, 3-Chloroaniline 108-45-2, 1,3-Phenylenediamine, reactions 108-91-8, Cyclohexylamine, reactions 109-01-3, 1-Methylpiperazine 109-73-9, Butylamine, reactions 109-85-3, 2-Methoxyethylamine 109-90-0, Ethyl isocyanate 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions 118-92-3, Anthranilic acid 120-53-6, 6-Ethoxy-2-mercaptopbenzothiazole 122-80-5, 4'-Aminoacetonilide 123-75-1, Pyrrolidine, reactions 134-32-7, 1-Naphthylamine 135-73-9, 2-Bromo-4'-phenylacetophenone 144-80-9 351-28-0, 3'-Fluoroacetonilide 352-91-0, 1-Bromo-3-fluoropropane 364-76-1, 4-Fluoro-3-nitroaniline 383-53-9, 2-Bromo-4'-trifluoromethylacetophenone 402-49-3, 4-(Trifluoromethyl)benzyl bromide 403-29-2, 2-Bromo-4'-fluoroacetophenone 447-31-4, 2-Chloro-2-phenylacetophenone 453-71-4, 4-Fluoro-3-nitrobenzoic acid 461-82-5, 4-(Trifluoromethoxy)aniline 462-08-8, 3-Aminopyridine 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine 534-07-6, 1,3-Dichloroacetone 536-38-9, 2-Bromo-4'-chloroacetophenone 578-66-5, 8-Aminoquinoline 580-15-4, 6-Aminoquinoline 583-39-1, 2-Mercaptobenzimidazole 611-34-7, 5-Aminoquinoline 613-54-7, 2-Bromo-2'-acetonaphthone 615-22-5, 2-(Methylthio)benzothiazole 616-34-2, Glycine methyl ester 619-41-0, 2-Bromo-4'-methylacetophenone 619-45-4, Methyl 4-aminobenzoate

622-78-6, Benzyl isothiocyanate 627-18-9 627-42-9, 2-Chloroethyl methyl ether 635-22-3, 4-Chloro-3-nitroaniline 694-28-0, 2-Chlorocyclopentanone 722-92-9, 4-(1,1,1,3,3,3-Hexafluoro-2-hydroxyisopropyl)aniline 816-40-0, 1-Bromo-2-butanone 822-87-7, 2-Chlorocyclohexanone 877-35-0, 2-Bromobutyrophenone 937-38-2, 1-Chloro-3-phenylpropan-2-one 1003-03-8, Cyclopentylamine 1009-35-4, 4-Fluoro-3-nitrobenzonitrile 1118-68-9, N,N-Dimethylglycine 1125-60-6, 5-Aminoisoquinoline 1129-28-8, Methyl 3-(bromomethyl)benzoate 1198-27-2, 1-Amino-2-naphthol hydrochloride 1477-42-5, 2-Amino-4-methylbenzothiazole 1532-84-9, 1-Aminoisoquinoline 1694-29-7, 3-Chloro-2,4-pentanedione 1711-05-3, 3-Methoxybenzoyl chloride 1744-22-5, 2-Amino-6-(trifluoromethoxy)benzothiazole 1821-39-2, 2-Propylaniline 1943-83-5, 2-Chloroethyl isocyanate 2008-75-5, 1-(2-Chloroethyl)piperidine hydrochloride 2038-03-1, N-(2-Aminoethyl)morpholine 2103-88-0, 2-Mercapto-4-phenylthiazole 2114-00-3, 2-Bromopropiophenone 2221-00-3, 4-(1H-Imidazol-1-yl)aniline 2237-30-1, 3-Aminobenzonitrile 2257-09-2, Phenethyl isothiocyanate 2365-48-2, Methyl thioglycolate 2382-96-9, 2-Mercaptobenzoxazole 2524-67-6, 4-(Morpholin-4-yl)aniline 2632-13-5, 2-Bromo-4'-methoxyacetophenone 2687-43-6, O-Benzylhydroxylamine hydrochloride 2740-85-4, 3-(Trifluoromethyl)benzyl isothiocyanate 2835-68-9, 4-Aminobenzamide 2912-62-1, Chlorophenylacetyl chloride 3544-24-9, 3-Aminobenzamide 3647-69-6, 4-(2-Chloroethyl)morpholine hydrochloride 3694-57-3, 4-Methoxybenzyl isothiocyanate 3694-58-4, 3-Chlorobenzyl isothiocyanate 3696-66-0, 3-Methylbenzyl isothiocyanate 3845-33-8, 3-Bromobenzyl isothiocyanate 4091-39-8, 3-Chloro-2-butanone 4214-76-0, 2-Amino-5-nitropyridine 4274-38-8, 2-Amino-4-(trifluoromethyl)benzenethiol hydrochloride 4518-10-9, Methyl 3-aminobenzoate 4650-60-6, 2-Furfuryl isothiocyanate 4800-27-5, 1-Methylquinoline-2-thione 4845-58-3, 2-Mercapto-6-nitrobenzothiazole 5000-65-7, 2-Bromo-3'-methoxyacetophenone 5331-91-9, 5-Chloro-2-mercaptobenzothiazole 5332-06-9, 4-Bromobutyronitrile 5332-73-0, 3-Methoxypropylamine 5464-79-9, 2-Amino-4-methoxybenzothiazole 5465-65-6, 4'-Chloro-3'-nitroacetophenone 5685-05-2, 2-Mercaptothiazole 6232-11-7, Methyl 4-(aminomethyl)benzoate hydrochloride 6321-11-5, 4-Aminothymol hydrochloride **6322-56-1**, 4'-Hydroxy-3'-nitroacetophenone 6373-46-2, 4-Benzylxyaniline 6373-50-8, 4-Cyclohexylaniline 6482-24-2, 2-Bromoethyl methyl ether 6851-99-6, 2-Bromo-2'-nitroacetophenone 7340-70-7, 2-Mercapto-6-acetamidobenzothiazole 7442-07-1, 6-Amino-2-mercaptobenzothiazole 7648-01-3, N-Ethylrhodanine 10112-15-9, N-Ethyl-2-nitroaniline 10574-69-3, N-Benzylrhodanine 13010-19-0, 3-Chloropropyl isocyanate 13091-23-1, 4-Chloro-3-nitropyridine 13207-66-4, 5-Aminoquinolin-8-ol 13515-93-0, Sarcosine methyl ester hydrochloride 14268-66-7, 3,4-(Methylenedioxy)aniline 16596-41-1, 1-Aminopyrrolidine 16629-19-9, 2-(Thiophene)sulfonyl chloride 17026-81-2, N-(3-Amino-4-ethoxyphenyl)acetamide 17420-30-3, 5-Nitroanthranilonitrile 17608-09-2, 2-Methoxybenzyl isothiocyanate 19335-11-6, 5-Aminoindazole 19952-47-7, 2-Amino-4-chlorobenzothiazole 19975-56-5, 2-Methylthio-2-thiazoline 21086-33-9, 2-Bromo-4'-methoxypropiophenone 21726-71-6, 2-Bromo-3'-methoxypropiophenone 24767-67-7, 3-Chloro-1-phenylbutan-2-one 29927-08-0, 2-Amino-5,6-dimethylbenzothiazole 31949-21-0, 2-Bromo-2'-methoxyacetophenone 38818-50-7, 4-Chloro-3-nitrobenzoyl chloride 51552-16-0, N,N-Dimethylaminoacetyl chloride 51929-59-0, 2-(Trifluoromethyl)benzyl isothiocyanate 52395-66-1, Cyclohexylmethyl isothiocyanate 53631-18-8, 2-Bromo-3'-fluoroacetophenone 54109-16-9 55514-14-2,

3-Methyl-2-(methylthio)benzothiazol-3-ium p-toluenesulfonate 55690-60-3,
 2-Mercapto-5-methoxybenzothiazole 60965-26-6, 2-Bromo-2',4'-dimethoxyacetophenone 63351-94-0, 3-Fluorobenzyl isothiocyanate 66668-41-5, N1-Ethyl-4-nitrobenzene-1,2-diamine 75272-77-4, 3-Methoxybenzyl isothiocyanate 76650-08-3, 2,3'-Dibromopropiophenone 80087-71-4, 6-Fluoro-2-mercaptopbenzothiazole 103962-10-3, 2-Bromo-4'-(trifluoromethoxy)acetophenone 135333-25-4, 2-Bromo-2'-methoxypropiophenone 143174-02-1, 3-Amino-4-(ethylamino)benzonitrile 145013-05-4, N,N'-Di(tert-butoxycarbonyl)thiourea 147342-57-2, 3-Picolyl isothiocyanate hydrobromide 149789-77-5, Rhodanine-3-acetic acid methyl ester 157160-99-1, 4-Chloro-3-nitrobenzoic acid tert-butyl ester 157665-51-5, 3-Fluoro-4-nitrobenzoyl chloride 183251-94-7, 3-Amino-4-(dimethylamino)benzonitrile 196394-40-8, 5'-Amino-2'-cyanoacetanilide 199916-98-8, 3-Methyl-2-methylthio-4,5,6,7-tetrahydrobenzothiazol-3-ium p-toluenesulfonate 355022-20-7, 3-Amino-4-(isopropylamino)benzonitrile 448948-73-0, Methyl 3-(isothiocyanatomethyl)benzoate 562825-47-2, 3'-Amino-4'-(ethylamino)acetophenone 562826-09-9, 2-[5-Acetyl-2-ethylaminophenyl] imino]-3-benzylthiazolidin-4-one 562826-58-8, 3'-Amino-2-(dimethylamino)-4'-ethylaminoacetanilide 562826-77-1, 3'-Amino-4'-ethylamino-2-methoxyacetanilide 562826-88-4, 5-(2-Methoxyethoxy)-2-(methylthio)benzothiazole 562827-10-5, 4-Ethylamino-3-[[4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene]amino]benzonitrile 562827-16-1, 3-Bromo-4-oxopiperidine-1-carboxylic acid 9H-fluoren-9-ylmethyl ester 562827-25-2, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-[(pyridin-3-yl)methyl]thiazolidin-4-one

RL: RCT (Reactant); RACT (Reactant or reagent)

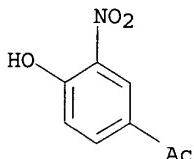
(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 345-30-2P, 3'-Fluoro-4'-nitroacetanilide 2788-74-1P,
 4-Ethylamino-3-nitrobenzoic acid 3048-46-2P, 4-Methoxybenzothiazole 3235-69-6P, Morpholin-4-ylacetic acid 3507-36-6P, 4-Methoxy-2-methylthiobenzothiazole 4773-35-7P, 1-Chloro-1-phenylpropan-2-one 5093-64-1P, N-(5-Nitropyridin-2-yl)acetamide 5540-60-3P, N-(4-Chloro-3-nitrophenyl)acetamide 6322-59-4P, 3-Cyclohexylrhodanine 23420-87-3P, 2-Mercapto-5-(trifluoromethyl)benzothiazole 23838-73-5P, N-Ethyl-1,2-phenylenediamine 24430-26-0P, 4'-Ethoxy-3'-nitroacetophenone 35009-16-6P, Methyl 4-(isothiocyanatomethyl)benzoate 36894-61-8P, 5-Acetamidobenzothiazole 41270-42-2P, Triethylammonium benzyldithiocarbamate 41504-13-6P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxothiazolidin-4-one 55514-13-1P, 1-Methyl-2-methylthioquinolinium p-toluenesulfonate 56813-48-0P, 5-Amino-2-methylthiobenzothiazole 58759-62-9P, 5-Acetamido-2-mercaptopbenzothiazole 60853-81-8P, N,N-Dimethylaminoacetyl chloride hydrochloride 63224-35-1P, N-(2-Isothiocyanatoethyl)morpholine 64910-45-8P, 4-Methylamino-3-nitrobenzonitrile 64910-46-9P, 3-Amino-4-(methylamino)benzonitrile 73894-38-9P, 2-Cyano-4-nitroacetanilide 76209-01-3P, 4'-Mercapto-3'-nitroacetanilide 77008-07-2P, 3,5-Dimethyl-4-phenyl-3H-thiazole-2-thione 79610-23-4P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxothiazolidin-4-one 90607-40-2P, 4-Ethylamino-3-nitroaniline 90895-33-3P, 3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-thioxothiazolidin-4-one 99987-79-8P, N-Ethyl-4-ethylamino-3-nitrobenzamide 105550-72-9P, Triethylammonium N-(2-hydroxyethyl)dithiocarbamate 108018-02-6P, 3'-Amino-4'-mercaptopacetanilide 108859-12-7P, 3-Ethyl-5-(3-methyl-3H-

benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate
 116091-85-1P, 4-Chloro-N-(2-hydroxyethyl)-3-nitrobenzamide 167982-24-3P,
 Morpholin-4-ylacetyl chloride hydrochloride 180863-54-1P, Methyl
 3-(azidomethyl)benzoate 202279-85-4P, 3'-Ethylamino-4'-nitroacetanilide
 294193-71-8P, 2-(Dimethylamino)-3'-nitroacetanilide 339556-33-1P,
 2-Methylthio-6-(trifluoroacetamido)benzothiazole 380330-17-6P,
 1-Butyl-3-(3-cyanophenyl)thiourea 396652-42-9P, 4-Ethylamino-3-
 nitrobenzoic acid methyl ester 562824-99-1P, 3-Benzyl-5-(3-methyl-3H-
 benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate
 562825-39-2P, 3-[(3-Butyl-4-oxothiazolidin-2-ylidene)amino]benzonitrile
 562825-51-8P, 1-Benzyl-3-(5-cyano-2-ethylaminophenyl)thiourea
 562825-52-9P, 3-[(3-Benzyl-4-oxothiazolidin-2-ylidene)amino]-4-
 (ethylamino)benzonitrile 562825-76-7P, 2-[(3-Acetylphenyl)imino]-3-
 (pyridin-3-ylmethyl)thiazolidin-4-one 562825-88-1P, 4-Ethylamino-3-
 nitrobenzoic acid tert-butyl ester 562825-95-0P, 4-Ethylamino-3-
 nitropyridine 562825-99-4P, N-Ethyl-3-ethylamino-4-nitrobenzamide
 562826-01-1P, 4-Chloro-N-[2-(dimethylamino)ethyl]-3-nitrobenzamide
 562826-02-2P, N-[2-(Dimethylamino)ethyl]-4-ethylamino-3-nitrobenzamide
 562826-04-4P, 4-(4,5-Dihydrooxazol-2-yl)-N1-ethylbenzene-1,2-diamine
 562826-05-5P, (Ethyl)[4-(4,5-Dihydrooxazol-2-yl)-2-nitrophenyl]amine
 562826-16-8P, 3-Benzyl-1-methyl-2-thioxoimidazolidin-4-one 562826-23-7P,
 2-[(3-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-
 ylidene)thiazolidin-4-one 562826-38-4P, 4'-Ethylamino-3'-
 nitroacetanilide 562826-44-2P, 4'-Ethylamino-2-(morpholin-4-yl)-3'-
 nitroacetanilide 562826-48-6P, 4'-Ethylamino-3'-nitro-2,2,2-
 trifluoroacetanilide 562826-50-0P, 2-(Dimethylamino)-4'-ethylamino-3'-
 nitroacetanilide 562826-52-2P, 4-Methylpiperazine-1-carboxylic acid
 N-(4-ethylamino-3-nitrophenyl)amide 562826-56-6P, 4'-Ethylamino-2-(4-
 methylpiperazin-1-yl)-3'-nitroacetanilide 562826-60-2P,
 5-(2-Chloroethoxy)-2-methylthiobenzothiazole 562826-61-3P,
 5-Hydroxy-2-methylthiobenzothiazole 562826-63-5P, 3-Benzyl-5-[5-(2-
 chloroethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-
 thiazolium p-toluenesulfonate 562826-66-8P, 3-Benzyl-5-[5-(2-
 methoxyethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-
 thiazolium p-toluenesulfonate 562826-68-0P, 4'-Ethylamino-2-methoxy-3'-
 nitroacetanilide 562826-72-6P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-
 (furan-2-ylmethyl)thiazolidin-4-one 562826-80-6P, N-[4-Ethylamino-3-[(3-
 (furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene)amino]phenyl]-2-
 methoxyacetamide 562826-82-8P, 2-Acetoxy-4'-ethylamino-3'-
 nitroacetanilide 562826-92-0P, N-[3-[(5-(2-Azidoethoxy)-3-methyl-3H-
 benzothiazol-2-ylidene)-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-
 ethylaminophenyl]-2-(dimethylamino)acetamide 562826-94-2P,
 2-(Dimethylamino)-N-[3-[(3-furan-2-ylmethyl)-4-oxothiazolidin-2-
 ylidene]amino]phenylacetamide 562826-95-3P, 3'-Amino-2-
 (dimethylamino)acetanilide 562827-11-6P, Methyl 4-[[2-[(5-acetyl-2-
 ethylaminophenyl)imino]-4-oxothiazolidin-3-yl]methyl]benzoate
 562827-62-7P, Triethylammonium N-(2-methoxyethyl)dithiocarbamate
 562827-64-9P, Triethylammonium N-(3-methoxypropyl)dithiocarbamate
 562827-66-1P, Triethylammonium N-[(methoxycarbonyl)methyl]dithiocarbamate
 562827-68-3P, 2-(5-Methyl-4-phenyl-2-thioxo-2,3-dihydrothiazol-3-yl)ethyl
 acetate 562827-69-4P, 3-(2-Hydroxyethyl)-5-methyl-4-phenyl-3H-thiazole-2-
 thione 562827-72-9P, 3'-Benzyl-3,5-dimethyl-4-phenyl-2'-thioxo-2',3'-
 dihydro-3H-[2,5']bithiazolylidene-4'-one 562828-10-8P,
 2-Methylthio-5-(2,2,2-trifluoroacetamido)benzothiazole
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation of phenylimino thiazolylidene thiazolidinones and other

heterocyclic modulators of nuclear receptors with therapeutic uses)
IT 566213-02-3, 1: PN: WO03060078 SEQID: 1 unclaimed DNA 566213-04-5, 3:
PN: WO03060078 SEQID: 3 unclaimed DNA 566213-06-7, 5: PN: WO03060078
SEQID: 5 unclaimed DNA 566213-08-9, 7: PN: WO03060078 SEQID: 7 unclaimed
DNA 566213-10-3, 9: PN: WO03060078 SEQID: 9 unclaimed DNA 566213-12-5
566213-14-7 566213-16-9 566213-18-1
RL: PRP (Properties)
(unclaimed nucleotide sequence; preparation of phenylimino thiazolylidene
thiazolidinones and other heterocyclic modulators of nuclear receptors
with therapeutic uses)
IT 566213-03-4 566213-05-6 566213-07-8 566213-09-0 566213-11-4
566213-13-6 566213-15-8 566213-17-0 566213-19-2
RL: PRP (Properties)
(unclaimed protein sequence; preparation of phenylimino thiazolylidene
thiazolidinones and other heterocyclic modulators of nuclear receptors
with therapeutic uses)
IT 6322-56-1, 4'-Hydroxy-3'-nitroacetophenone
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of phenylimino thiazolylidene thiazolidinones and other
heterocyclic modulators of nuclear receptors with therapeutic
uses)
RN 6322-56-1 HCPLUS
CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 8 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:72070 HCPLUS
DOCUMENT NUMBER: 136:134677
TITLE: Substituted 2-(S)-hydroxy-3-[(piperidin-4-yl-methyl)amino]propyl ethers and substituted
2-aryl-2-(R)-hydroxy-1-(piperidin-4-yl-methyl)ethylamines as beta-3 adrenergic receptor
agonists, antidiabetics, and
antiobesity agents
INVENTOR(S): Steffan, Robert John; Ashwell, Mark Anthony;
Pelletier, Jeffrey Claude; Solvibile, William Ronald;
Matelan, Edward Martin
PATENT ASSIGNEE(S): American Home Products Corporation, USA
SOURCE: PCT Int. Appl., 216 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002006255 A2 20020124 WO 2001-US22363 20010716 <--
 WO 2002006255 A3 20020321

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002037907 A1 20020328 US 2001-903738 20010712 <--
 US 6506901 B2 20030114

PRIORITY APPLN. INFO.: US 2000-218753P P 20000717 <--

OTHER SOURCE(S): MARPAT 136:134677

ED Entered STN: 25 Jan 2002

AB The invention provides title compds. I and their pharmaceutically acceptable salts [wherein A = OCH₂, bond; R = (un)substituted aryl or certain N/O/S heterocyclyl; R₁ = (cyclo)alkyl, alkoxy, (cyclo)alkylamino, (un)substituted aryl, arylamino, arylalkyl, or heterocyclyl; Z = bond, SO₂, CO]. I are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenic inflammation, glaucoma, ocular hypertension, and frequent urination. The compds. are particularly useful in the treatment or inhibition of type II diabetes. They are also useful for increasing lean meat deposition and/or increasing the lean meat to fat ratio in animals, particularly mammals. Approx. 240 individual compds. and addnl. salts were prepared by either standard or combinatorial methods. For instance, invention compound II was prepared by reaction of the (S)-isomeric epoxide III with the corresponding amine. II had an EC₅₀ of 0.001 μM against cloned human β3 adrenoceptors in vitro, with a maximal response comparable to isoproterenol.

IC ICM C07D265-00

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 18

ST piperidine beta 3 adrenergic receptor agonist antidiabetic antiobesity prepns; hydroxyaminopropyl ether hydroxyethylamine combinatorial antiglaucoma antiinflammatory antiobesity feed additive

IT Antiarteriosclerotics

(antiatherosclerotics; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Bladder, disease

(incontinence, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Inflammation

(neurogenic, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Antihypertensives

(ocular; preparation of piperidine hydroxyaminopropyl ether and

- hydroxyethylamine derivs. as β_3 adrenergic receptor agonists,
antidiabetics, and antiobesity agents)
- IT Anti-inflammatory agents
Antidiabetic agents
Antiglaucoma agents
Antiobesity agents
Combinatorial library
Feed additives
Human
 β_3 -Adrenoceptor agonists
(preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT β_3 -Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT Growth factors, animal
RL: FFD (Food or feed use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT Digestive tract, disease
(treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 85-46-1, 1-Naphthalenesulfonyl chloride 98-09-9, Benzenesulfonyl chloride 98-59-9, 4-Methylbenzenesulfonyl chloride 121-60-8, 4-Acetamidobenzenesulfonyl chloride 605-65-2, Dansyl chloride 1138-56-3, 4-Butoxybenzenesulfonyl chloride 1623-93-4, Biphenyl-4-ylsulfonyl chloride 1939-99-7, Benzylsulfonyl chloride 2905-24-0, 3-Bromobenzenesulfonyl chloride 6553-96-4, 2,4,6-Triisopropylbenzenesulfonyl chloride 15084-51-2, 4-tert-Butylbenzenesulfonyl chloride 16712-69-9, 4-Ethylbenzenesulfonyl chloride 54997-90-9, 4-Isopropylbenzenesulfonyl chloride 54997-92-1, 4-Butylbenzenesulfonyl chloride 64062-91-5, 4-Bromo-2-ethylbenzenesulfonyl chloride 73713-79-8, 2,1,3-Benzothiadiazole-4-sulfonyl chloride 82964-91-8, 4-(Methylsulfonyl)benzenesulfonyl chloride 138872-44-3, 5-[(Benzoylamino)methyl]thiophene-2-sulfonyl chloride 151858-64-9, 5-(Pyridin-2-yl)thiophene-2-sulfonyl chloride 166964-36-9, 4-Bromo-2,5-dichlorothiophene-3-sulfonyl chloride 166964-37-0, 5-(Phenylsulfonyl)thiophene-2-sulfonyl chloride 169677-20-7, 4-tert-Pentylbenzenesulfonyl chloride 175202-76-3, 5-[2-(Methylthio)pyrimidin-4-yl]thiophene-2-sulfonyl chloride 175202-87-6, 5-[(5-(Trifluoromethyl)pyridin-2-yl)sulfonyl]thiophene-2-sulfonyl chloride RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(combinatorial reactant; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 392688-52-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(naphthalene-2-sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392688-54-9P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392688-58-3P, 4-[(2S)-2-Hydroxy-3-[[[1-(4-

methoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol
 392688-60-7P, 4-[(2S)-2-Hydroxy-3-[[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydrobenzoimidazol-2-one
 392688-63-0P, 4-[(2S)-2-Hydroxy-3-[[[1-(3,4-dimethoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydrobenzoimidazol-2-one
 392688-64-1P, 4-[(2S)-2-Hydroxy-3-[[[1-(3,4-dimethoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol
 RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antioesity agents)

IT 392689-39-3P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-40-6P,
 4-[(2S)-2-Hydroxy-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-41-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392689-42-8P, 4-[(2S)-2-Hydroxy-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
 392689-43-9P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-[(4-isopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392689-44-0P, 4-[(2S)-2-Hydroxy-3-[[[1-[(4-isopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-45-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(4-isopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-46-2P,
 4-[(2S)-2-Hydroxy-3-[[[1-[(4-isopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
 392689-47-3P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(4-isopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide 392689-48-4P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-[(4-ethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392689-49-5P, 4-[(2S)-3-[[[1-[(4-Ethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-50-8P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(4-ethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-51-9P, 4-[(2S)-3-[[[1-[(4-Ethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-52-0P, N-[5-[(1R)-2-[[[1-[(4-Ethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-53-1P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-[(4-methoxyphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-54-2P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-56-4P, 4-[(2S)-2-Hydroxy-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-57-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-58-6P, 4-[(2S)-2-Hydroxy-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
 392689-59-7P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide 392689-60-0P, (2S)-1-[4-(Benzyl)phenoxy]-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-61-1P, 4-[(2S)-2-Hydroxy-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-62-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(2,3,4,5,6-

pentamethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol
392689-63-3P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-64-4P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-65-5P,
(2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol
392689-66-6P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol
392689-67-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol
392689-68-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-69-9P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-70-2P,
(2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-71-3P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol
392689-72-4P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-73-5P,
4-[[[(2S)-2-Hydroxy-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
392689-74-6P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-75-7P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-76-8P,
4-[[[(2S)-2-Hydroxy-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392689-77-9P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-78-0P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-79-1P,
(2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[[4-(tert-butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol
392689-80-4P, 4-[[[(2S)-3-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-81-5P,
(2S)-1-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-82-6P, 4-[[[(2S)-3-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-83-7P, N-[5-[(1R)-2-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-84-8P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[(4-bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-85-9P, 4-[[[(2S)-3-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-86-0P, (2S)-1-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-87-1P, 4-[[[(2S)-3-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-88-2P, N-[5-[(1R)-2-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-89-3P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[(4-bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-90-6P,
4-[[[(2S)-3-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol

yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-91-7P,
(2S)-1-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-
yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-92-8P,
4-[[2S)-3-[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-
yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
392689-93-9P, N-[5-[(1R)-2-[[1-[(4-Bromo-2,5-dichlorothien-3-
yl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-
hydroxyphenyl]methanesulfonamide 392689-94-0P, (2S)-1-[4-
(Benzyl)oxy]phenoxy]-3-[[1-[(3-bromophenyl)sulfonyl]piperidin-4-
yl]methyl]amino]propan-2-ol 392689-95-1P, 4-[[2S)-3-[[1-[(3-
Bromophenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-
hydroxypropyl]oxy]phenol 392689-96-2P, (2S)-1-[[1-[(3-
Bromophenyl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-
yloxy)propan-2-ol 392689-97-3P, 4-[[2S)-3-[[1-[(3-
Bromophenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-
dihydro-2H-benzimidazol-2-one 392689-98-4P 392690-00-5P,
N-[5-[[4-[[2S)-3-[(Benzyl)oxy]phenoxy]-2-hydroxypropyl]amino]methyl]pi-
peridin-1-yl]sulfonyl]thien-2-yl]methyl]benzamide 392690-02-7P,
N-[5-[[4-[[2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperi-
din-1-yl]sulfonyl]thien-2-yl]methyl]benzamide 392690-04-9P,
N-[5-[[4-[[2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]pi-
peridin-1-yl]sulfonyl]thien-2-yl]methyl]benzamide 392690-06-1P,
N-[5-[[4-[[2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzimidazol-4-
yl)oxy]propyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-
yl]methyl]benzamide 392690-08-3P, N-[5-[[4-[[2R)-2-Hydroxy-2-[4-
hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-
yl]sulfonyl]thien-2-yl]methyl]benzamide 392690-10-7P,
(2S)-1-[4-(Benzyl)oxy]-3-[[1-[(4-butoxyphenyl)sulfonyl]piperidin-4-
yl)methyl]amino]propan-2-ol 392690-12-9P, (2S)-1-[[1-[(4-
Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-
yloxy)propan-2-ol 392690-14-1P, 4-[[2S)-3-[[1-[(4-
Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-
1,3-dihydro-2H-benzimidazol-2-one 392690-15-2P, N-[5-[(1R)-2-[[1-[(4-
Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-
hydroxyphenyl]methanesulfonamide 392690-17-4P, (2S)-1-[4-
(Benzyl)oxy]-3-[[1-[(4-butylphenyl)sulfonyl]piperidin-4-
yl)methyl]amino]propan-2-ol 392690-19-6P, 4-[[2S)-3-[[1-[(4-
Butylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-
hydroxypropyl]oxy]phenol 392690-21-0P, (2S)-1-[[1-[(4-
Butylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-
yloxy)propan-2-ol 392690-23-2P, 4-[[2S)-3-[[1-[(4-
Butylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-
dihydro-2H-benzimidazol-2-one 392690-25-4P, N-[5-[(1R)-2-[[1-[(4-
Butylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-
hydroxyphenyl]methanesulfonamide 392690-27-6P, N-[4-[[4-[[2S)-3-(9H-
Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidin-1-
yl]sulfonyl]phenyl]acetamide 392690-28-7P, N-[4-[[4-[[2S)-2-Hydroxy-3-
[(2-oxo-2,3-dihydro-1H-benzimidazol-4-yl)oxy]propyl]amino]methyl]piperidin-
1-yl]sulfonyl]phenyl]acetamide 392690-29-8P, (2S)-1-[4-
(Benzyl)oxy]-3-[[1-[[1,1'-biphenyl]-4-yl)sulfonyl]piperidin-4-
yl)methyl]amino]propan-2-ol 392690-30-1P, 4-[[2S)-3-[[1-[[1,1'-
Biphenyl]-4-yl)sulfonyl]piperidin-4-yl)methyl]amino]-2-
hydroxypropyl]oxy]phenol 392690-31-2P, (2S)-1-[[1-[(1,1'-Biphenyl)-4-
yl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-
ol 392690-32-3P, 4-[[2S)-3-[[1-[(1,1'-Biphenyl)-4-
yl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-
2H-benzimidazol-2-one 392690-33-4P, N-[5-[(1R)-2-[[1-[(1,1'-Biphenyl)-

4-yl]sulfonyl)piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl)methanesulfonamide 392690-34-5P, (2S)-1-[[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl]methyl]amino]-3-[4-(benzyloxy)phenoxy]propan-2-ol 392690-35-6P, 4-[[[(2S)-3-[[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-36-7P, (2S)-1-[[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-37-8P, 4-[[[(2S)-3-[[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-38-9P, N-[5-[(1R)-2-[[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl)methanesulfonamide 392690-39-0P, (2S)-1-[4-(Benzylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-40-3P, (2S)-1-[[[1-(Benzylsulfonyl)piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-41-4P, 4-[[[(2S)-3-[[[1-(Benzylsulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-42-5P, (2S)-1-[4-(Benzylsulfonyl)phenoxy]-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-43-6P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-44-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-45-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-46-9P, (2S)-1-[4-(Benzylsulfonyl)phenoxy]-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-47-0P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-49-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-50-5P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-51-6P, (2S)-1-[4-(Benzylsulfonyl)phenoxy]-3-[[[1-[[4-methylphenyl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-52-7P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-methylphenyl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-53-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[4-methylphenyl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-54-9P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-methylphenyl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-55-0P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[[4-methylphenyl]sulfonyl)piperidin-4-yl]methyl]amino]ethyl]phenyl)methanesulfonamide 392690-56-1P, (2S)-1-[4-(Benzylsulfonyl)phenoxy]-3-[[[1-[(3,4-dimethoxyphenyl)sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-57-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(3,4-dimethoxyphenyl)sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-58-3P, N-[5-[(1R)-2-[[[1-[(3,4-Dimethoxyphenyl)sulfonyl)piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl)methanesulfonamide 392690-59-4P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(trifluoromethyl)pyridin-2-yl]sulfonyl]thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-60-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-(trifluoromethyl)pyridin-2-yl]sulfonyl]thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-61-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(trifluoromethyl)pyridin-2-yl]sulfonyl]thien-2-yl]sulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-62-9P, (2S)-1-[4-(Benzylsulfonyl)phenoxy]-3-[[[1-[[5-(dimethylamino)-1-naphthyl]sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-63-0P,

4-[[[2S]-3-[[[1-[[5-(Dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-64-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-(dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-65-2P,
 4-[[[2S]-3-[[[1-[[5-(Dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
 392690-66-3P, (2S)-1-[4-(Benzylxy)phenoxy]-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-67-4P,
 4-[[[2S]-2-Hydroxy-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-68-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-70-9P, 4-[[[2S]-2-Hydroxy-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-71-0P, (2S)-1-[4-(Benzylxy)phenoxy]-3-[[[1-[[5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-72-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-73-2P, 4-[[[2S]-2-Hydroxy-3-[[[1-[[5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-74-3P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[[5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 392688-10-7P, 4-[[[2S]-2-Hydroxy-3-[[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propyl]oxy]fluoren-9-one 392688-15-2P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-propylpiperidin-4-yl]methyl]amino]propan-2-ol 392688-19-6P, (2S)-1-(4-Benzyloxyphenoxy)-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl]methyl]amino]propan-2-ol 392688-23-2P, 4-[[[2S]-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl]methyl]amino]propyl]oxy]fluoren-9-one 392689-11-1P,
 [3-Fluoro-4-[[[[4-[[[4-[[[R]-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]amino]carbonyl]amino]methyl]phenoxy]acetic acid methyl ester 392689-19-9P, [1-[4-[[4-[[[2R]-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indol-3-yl]acetic acid ethyl ester 392689-21-3P,
 1-[4-[[4-[[[2R]-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid methyl ester 392689-23-5P, Ethyl 1-[4-[[4-[[[2R]-2-hydroxy-2-[4-hydroxy-3-(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylate 392689-34-8P,
 (2S)-1-[[4-[[4-[[[2R]-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]pyrrolidine-2-carboxylic acid methyl ester

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 392688-07-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(7-

trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propan-2-ol
 392688-09-4P, (2S)-1-(4-Benzoyloxyphenoxy)-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propan-2-ol
 392688-11-8P, 4-[[2S]-2-Hydroxy-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propyl]oxy]fluoren-9-one oxime
 392688-12-9P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propan-2-ol
 392688-13-0P, 4-[[2S]-2-Hydroxy-3-[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propyl]oxy]fluoren-9-one
 392688-14-1P, 1-[[2S]-2-Hydroxy-3-[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propyl]oxy]fluoren-9-one
 392688-16-3P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-isopropylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-17-4P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392688-21-0P, 4-[[2S]-2-Hydroxy-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392688-25-4P, 4-[[2S]-2-Hydroxy-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]-9H-fluoren-9-ol 392688-27-6P, 4-[[2S]-2-Hydroxy-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]-9H-carbazol-3-ol
 392688-29-8P, (2S)-1-[(1-Bromo-9H-carbazol-4-yl)oxy]-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-31-2P, (2S)-1-[(1-Chloro-9H-carbazol-4-yl)oxy]-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-33-4P, (2S)-1-[(3-Bromo-9H-carbazol-4-yl)oxy]-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-35-6P, (2S)-1-[(3-Chloro-9H-carbazol-4-yl)oxy]-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-37-8P, (2S)-1-(1H-Indol-4-yloxy)-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-39-0P, (2S)-1-(1H-Indol-5-yloxy)-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392688-41-4P, 4-[[2S]-2-Hydroxy-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydrobenzoimidazol-2-one 392688-43-6P, (2S)-1-[(2-Methyl-1H-indol-4-yl)oxy]-3-[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-45-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(4,4,4-trifluorobutyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-46-9P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-pentylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-47-0P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-hexylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-48-1P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-octylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-49-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-tridecylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-50-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-pentadecylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-51-6P, 12-[[4-[[2S]-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidin-1-yl)dodecan-1-ol 392688-53-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(prop-2-ylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-55-0P, (2S)-1-[(3-Bromo-9H-carbazol-4-yl)oxy]-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392688-56-1P, (2S)-1-[(3-Chloro-9H-carbazol-4-yl)oxy]-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392688-57-2P, (2S)-1-[(1-Bromo-9H-carbazol-4-yl)oxy]-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392688-59-4P, 4-[[2S]-2-Hydroxy-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392688-61-8P, 4-[[2S]-2-Hydroxy-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-2-methyl-1H-indole 392688-62-9P, 4-[[2S]-3-[[1-(4-Methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]-2-

hydroxypropyl]oxy]-1,3-dihydroindol-2-one 392688-65-2P,
 4-[[[(2S)-3-[[[1-(3,4-Dimethoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]-
 2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one 392688-66-3P,
 4-[[[(2S)-2-Hydroxy-3-[[[1-(4-nitrobenzenesulfonyl)piperidin-4-
 yl)methyl]amino]propyl]oxy]phenol 392688-67-4P, 4-[[[(2S)-2-Hydroxy-3-
 [[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
 yl)methyl]amino]propyl]oxy]-1,3-dihydroindol-2-one 392688-68-5P,
 4-[[[(2S)-2-Hydroxy-3-[[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
 yl)methyl]amino]propyl]oxy]phenol 392688-69-6P, (1R)-1-(3-Chlorophenyl)-
 2-[[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
 yl)methyl]amino]ethanol 392688-70-9P, 4-[[[(2S)-2-Hydroxy-3-[[[1-((1-
 methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]ph
 enol 392688-71-0P, 3-[[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-
 hydroxypropyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl
 ester 392688-72-1P, 3-[[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-
 hydroxypropyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid
 392688-73-2P, 3-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]met
 hyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392688-74-3P,
 4-[[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperid
 ine-1-carbonyl]amino]benzoic acid ethyl ester 392688-75-4P,
 4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-
 1-carbonyl]amino]benzoic acid ethyl ester 392688-76-5P,
 4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-
 1-carboxylic acid hexylamide 392688-77-6P, 4-[[[(2S)-3-(9H-Carbazol-4-
 yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-carboxylic acid
 cyclohexylamide 392688-79-8P, 4-[[[(2S)-2-Hydroxy-3-(4-
 hydroxyphenoxy)propyl]amino]methyl]piperidine-1-carboxylic acid
 cyclohexylamide 392688-80-1P, 1-[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-
 hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-hexylurea
 392688-81-2P, 1-Hexyl-3-[[4-[[[(2S)-2-hydroxy-3-(4-
 hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea
 392688-82-3P, 1-Hexyl-3-[[4-[[[(2S)-2-hydroxy-3-[(2-oxo-2,3-dihydro-1H-
 benzimidazol-4-yl)oxy]propyl]amino]methyl]piperidine-1-
 sulfonyl]phenyl]urea 392688-83-4P, 1-[[4-[[[(2S)-2-Hydroxy-3-(2-
 methyl-1H-indol-7-yl)oxy]propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-
 3-phenylurea 392688-84-5P, 1-[[4-[[[(2S)-2-Hydroxy-3-(2-oxo-2,3-
 dihydro-1H-benzimidazol-4-yloxy)propyl]amino]methyl]piperidine-1-
 sulfonyl]phenyl]-3-phenylurea 392688-85-6P, 1-[[4-[[[(2S)-2-Hydroxy-3-
 (4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-
 phenylurea 392688-86-7P, 1-Cyclohexyl-3-[[4-[[[(2S)-2-hydroxy-3-(4-
 hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea
 392688-87-8P, 1-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]m
 ethyl]piperidine-1-sulfonyl]phenyl]-3-isobutylurea 392688-88-9P,
 1-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidi
 ne-1-sulfonyl]phenyl]-3-pyridin-2-ylurea 392688-89-0P,
 N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[4-[3-(pyridin-2-
 yl)ureido]benzenesulfonyl]piperidin-4-yl)methyl]amino]ethyl]phenyl]methane
 sulfonamide 392688-90-3P, N-[5-[1-Hydroxy-2-[[[1-[4-[3-(pyridin-2-
 yl)ureido]benzenesulfonyl]piperidin-4-yl)methyl]amino]ethyl]-1H-indol-7-
 yl]methanesulfonamide 392688-91-4P, 1-[[4-[[[(2S)-2-Hydroxy-3-(4-
 hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-
 octylurea 392688-92-5P, 1-[[4-[[[(2S)-2-Hydroxy-3-[(2-oxo-2,3-dihydro-
 1H-indol-4-yl)oxy]propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-
 octylurea 392688-93-6P, 4-[[2-Hydroxy-3-[[[1-[4-[3-
 octylureido]benzenesulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1H-
 indole-2-carboxylic acid amide 392688-94-7P, 1-[[4-[[[(2S)-2-Hydroxy-3-
 (1H-indol-5-yloxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-

octylurea 392688-95-8P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[[[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392688-96-9P, 1-[4-[4-[[[(2S)-2-Hydroxy-3-[(8-hydroxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yl)oxyl]propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392688-97-0P, 1-[4-[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-(3-thiophen-2-ylpropyl)urea 392688-98-1P, 1-(2,5-Difluorobenzyl)-3-[4-[4-[[[(2S)-2-hydroxy-3-(1H-indol-5-yloxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-00-8P, 1-(2,5-Difluorobenzyl)-3-[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-01-9P, 1-(2,5-Difluorobenzyl)-3-[4-[4-[[[(2S)-3-(3-fluoro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-02-0P, N-[5-[[[(2S)-3-[[1-[4-[3-(2,5-Difluorobenzyl)ureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-2-hydroxyphenyl]methanesulfonamide 392689-03-1P, 1-[4-[4-[[[(2S)-3-(2-Chloro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-(2,5-difluorobenzyl)urea 392689-04-2P, N-[5-[(1R)-2-[[1-[4-[[[[2-(2,5-Difluorophenyl)ethyl]amino]carbonyl]amino]phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-05-3P, 1-[2-(2,4-Difluorophenyl)ethyl]-3-[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-06-4P, 1-(2,6-Difluorophenyl)-3-[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-07-5P, N-[5-[(1R)-2-[[1-[4-[3-(2,6-Difluorobenzyl)-3-isopropylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-08-6P, N-[5-[2-[[1-[4-[3-(2,6-Difluorobenzyl)-3-methylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]methanesulfonamide 392689-09-7P, N-[5-[(1R)-2-[[1-[4-[3-(2,5-Difluorobenzyl)-3-isopropylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-10-0P, N-[5-[(R)-2-[[1-[4-[[[(2,5-Difluorophenyl)methyl]methyl]amino]carbonyl]phenyl]sulfonyl]-4-piperidinyl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-12-2P, [3-Fluoro-4-[[[[4-[[[(R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]amino]carbonyl]amino]methyl]phenoxy]acetic acid 392689-13-3P, Heptanoic acid[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]amide 392689-14-4P, N-(2,6-Difluorobenzyl)-4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]benzamide 392689-15-5P, 1H-Indazole-3-carboxylic acid[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]amide 392689-16-6P, 4-[[[(2S)-2-Hydroxy-3-[[1-((4-(pyrazol-1-yl)phenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-17-7P, 1-[4-[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-methylimidazolidin-2-one 392689-18-8P, 1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-2-carboxylic acid ethyl ester 392689-20-2P, [1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indol-3-yl]acetic acid 392689-22-4P, 1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid 392689-24-6P, 1-[4-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidine-1-

hyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylic acid 392689-25-7P, 4-[(2S)-2-Hydroxy-3-[[[1-[4-(5-octyl-1,2,4-oxadiazol-3-yl)benzenesulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol
 392689-26-8P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[4-(5-octyl-1,2,4-oxadiazol-3-yl)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-27-9P, 3-[3-[4-[4-[(2R)-2-Hydroxy-2-(4-hydroxy-3-(methanesulfonylamino)phenyl)ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propionic acid methyl ester
 392689-28-0P, 3-[3-[4-[[4-[(2S)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid
 392689-29-1P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[[[1-[4-(piperidine-1-sulfonyl)phenyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-30-4P, Methyl 6-[4-[[4-[(2R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]nicotinate
 392689-31-5P, (2S)-2-[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid 392689-32-6P, (2S)-2-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid 392689-33-7P,
 (2R)-2-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid 392689-35-9P, (2S)-1-[[4-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]pyrrolidine-2-carboxylic acid
 392689-36-0P, (2S)-2-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]amino]-3-phenylpropanoic acid 392689-37-1P,
 (2S)-2-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid 392689-38-2P,
 (2S)-1-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid 392692-26-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propan-2-ol dihydrochloride 392692-27-2P,
 4-[[2S)-2-Hydroxy-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propyl]oxy]fluoren-9-one oxime dihydrochloride
 392692-30-7P, 4-[[2S)-3-[[1-(4-Methoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one hydrochloride
 392692-31-8P, 4-[[2S)-3-[[1-(3,4-Dimethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one hydrochloride
 392692-32-9P, 4-[[2S)-2-Hydroxy-3-[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol hydrochloride
 392692-33-0P, (1R)-1-(3-Chlorophenyl)-2-[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]ethanol
 hydrochloride 392692-39-6P, N-[5-[1-Hydroxy-2-[[1-[4-(3-(pyridin-2-yl)ureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]-1H-indol-7-yl]methanesulfonamide dihydrochloride 392692-40-9P, 4-[[2-Hydroxy-3-[[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1H-indole-2-carboxylic acid amide hydrochloride 392692-47-6P,
 1-[[4-[[4-[(2R)-2-Hydroxy-2-(4-hydroxy-3-(methanesulfonylamino)phenyl)ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid
 methyl ester hydrochloride 392692-48-7P, Ethyl 1-[[4-[[4-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylate hydrochloride
 392692-52-3P, Methyl 6-[4-[[4-[(2R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylate hydrochloride

[(methylsulfonyl)amino]phenyl]ethyl]amino)methyl]piperidin-1-yl]nicotinate hydrochloride

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antioesity agents)

IT 312-32-3P, 1-[(4-Fluorophenyl)sulfonyl]piperidine 403-14-5P,
 1-(3-Fluoro-4-hydroxyphenyl)-1-ethanone 3363-68-6P, 1-Methyl-3-phenylimidazolidin-2-one 7699-17-4P, 4-Methoxy-2-oxindole 13402-55-6P,
 4-Hydroxy-2-oxindole 19689-86-2P, 2-Methoxy-6-nitrobenzyl bromide 20876-27-1P, 2-Methoxy-6-nitrobenzyl cyanide 20876-28-2P,
 2-Methoxy-6-nitrophenylacetic acid 22265-59-4P, 2,6-Difluoro-N-methylbenzamide 29650-44-0P, 2-Fluorophenyl acetate 34583-53-4P,
 N-Octyl-N'-phenylurea 59430-56-7P, 5,8-Dihydroxy-3,4-dihydro-2(1H)-quinolinone 59826-16-3P, 8-(Benzylxyloxy)-5-hydroxy-3,4-dihydro-2(1H)-quinolinone 64469-32-5P, N1-Methyl-N2-phenylethylenediamine 70260-86-5P, 4-((2S)-Oxiranyl)methoxy)-1H-indole 88915-26-8P,
 4-Aminomethyl-1-benzylpiperidine 95093-95-1P, 4-((2S)-Oxiranyl)methoxy)-9H-carbazole 108534-48-1P, tert-Butyl(4-hydroxyphenoxy)diphenylsilane 122797-04-0P, (S)-2-[(4-(Benzylxyloxy)phenoxy)methyl]oxirane 122860-33-7P,
 N-(Benzylxyloxy carbonyl)-4-(hydroxymethyl)piperidine 132740-52-4P,
 4-Aminomethyl-1-isopropylpiperidine 135632-53-0P, (Piperidin-4-ylmethyl)carbamic acid tert-butyl ester 138163-08-3P,
 N-(Benzylxyloxy carbonyl)-4-formylpiperidine 173340-23-3P,
 [(1-Benzylpiperidin-4-yl)methyl]carbamic acid tert-butyl ester 188646-83-5P, 4-Formylpiperidine dimethyl acetal 197774-51-9P,
 4-((2S)-Oxiranyl)methoxy)benzimidazol-2-one 199856-06-9P,
 1-Hexylpiperidine-4-carboxamide 200725-66-2P, 1-Pentylpiperidine-4-carboxamide 246262-32-8P, 5-((2S)-Oxiranyl)methoxy)-1H-indole 246544-68-3P, 4-Aminomethyl-1-hexylpiperidine 256373-18-9P,
 4-((2S)-Oxiranyl)methoxy)-2-methylindole 258345-25-4P,
 4-Aminomethyl-1-pentylpiperidine 280115-83-5P, 1-Isopropylpiperidine-4-carboxamide 292080-51-4P, 1-Propylpiperidine-4-carboxamide 300345-77-1P, 5-(2-Azido-1-(R)-hydroxyethyl)-2-(benzylxyloxy)methanesulfonanilide 326898-48-0P, 4-Carbamoyl-1-piperidinyl 4-nitrophenyl sulfone 332391-26-1P, 4-Carbamoyl-1-piperidinyl 4-methoxyphenyl sulfone 335390-47-1P, N-Cyclohexyl-4-carbamoyl-1-piperidinecarboxamide 340756-75-4P, 2-(4-Hydroxy-3-(methanesulfonamido)phenyl)-(2R)-2-hydroxyethylamine 373359-46-7P,
 8-(Benzylxyloxy)-5-((2S)-Oxiranyl)methoxy)-3,4-dihydro-2(1H)-quinolinone 373359-49-0P, 5-Chloroacetyl-2-benzylxyloymethanesulfonanilide 391671-82-2P, tert-Butyl-[4-((2S)-Oxiranyl)methoxy]phenoxy)diphenylsilane 391674-01-4P, tert-Butyl[4-(benzylxyloxy)phenoxy]diphenylsilane 392620-57-4P, 4-((tert-Butyldiphenylsilyl)oxy)-3-nitroacetophenone 392620-63-2P, Acetic acid 3-nitro-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-67-6P, Acetic acid 3-amino-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-72-3P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-[(methylsulfonyl)amino]phenyl acetate 392620-76-7P, 3-[(t-Butoxycarbonyl)(methylsulfonyl)amino]-4-[(tert-butyldiphenylsilyl)oxy]phenyl acetate 392621-01-1P, tert-Butyl-[2-fluoro-4-((2S)-Oxiranyl)methoxy]phenoxy)diphenylsilane 392621-05-5P,
 1-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl]-1-ethanone 392621-09-9P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl acetate 392621-13-5P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenol 392621-56-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorobenzaldehyde

392621-60-2P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenyl formate
392621-64-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenol
392621-68-0P, tert-Butyl-[3-chloro-4-((2S)-oxiranyl)methoxy]phenoxy]diphenylsilane 392636-61-2P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzonitrile 392636-65-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-fluorobenzylamine 392636-87-2P, [4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzyl]carbamic acid tert-butyl ester 392636-92-9P, (2-Fluoro-4-hydroxybenzyl)carbamic acid tert-butyl ester 392637-33-1P, [4-[(tert-Butoxycarbonyl)amino]methyl]-3-fluorophenoxy]acetic acid methyl ester 392637-38-6P, [4-(Aminomethyl)-3-fluorophenoxy]acetic acid methyl ester 392642-82-9P, 4-[[Octylamino]carbonyl]amino]benzenesulfonyle chloride 392690-75-4P, 1-Bromo-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-76-5P, 3-Bromo-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-77-6P, 1-Chloro-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-78-7P, 3-Chloro-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-79-8P, 3-Hydroxy-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-80-1P, 4-((2S)-Oxiranyl)methoxy)-9-fluorenone 392690-81-2P, 1-((2S)-Oxiranyl)methoxy)-9-fluorenone 392690-82-3P, 4-((2S)-Oxiranyl)methoxy)-2-oxindole 392690-83-4P, N-[2-[(tert-Butyldiphenylsilyl)oxy]-5-((2S)-oxiranyl)methoxy]phenyl]methanesulfonamide 392690-84-5P, N-[2-[(tert-Butyldiphenylsilyl)oxy]-5-hydroxyphenyl]methanesulfonamide 392690-85-6P, 5-(2-Chloro-1-(R)-hydroxyethyl)-2-(benzyloxy)methanesulfonanilide 392690-86-7P, 4-Carbamoyl-1-piperidinyl 4-aminophenyl sulfone 392690-87-8P, [[1-(4-Aminobenzenesulfonyl)piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392690-88-9P, 4-(Aminomethyl)piperidin-1-yl 4-nitrophenyl sulfone 392690-89-0P, [1-(4-Aminobenzenesulfonyl)piperidin-4-yl]methanal dimethyl acetal 392690-90-3P, [1-(4-Nitrobenzenesulfonyl)piperidin-4-yl]methanol 392690-91-4P, 1-(4-Nitrobenzenesulfonyl)piperidine-4-carboxaldehyde 392690-92-5P, 4-(Dimethoxymethyl)-1-(4-nitrobenzenesulfonyl)piperidine 392690-93-6P, N-(Benzylloxycarbonyl)-4-formylpiperidine dimethyl acetal 392690-94-7P, [1-(4-Fluorobenzenesulfonyl)piperidin-4-yl]carboxaldehyde dimethyl acetal 392690-95-8P, 4-Hydroxymethylpiperidin-1-yl 4-fluorophenyl sulfone 392690-96-9P, [1-(4-Fluorobenzenesulfonyl)piperidin-4-yl]carboxaldehyde 392690-97-0P, 4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoic acid 392690-98-1P, Methyl 4-[(4-hydroxymethyl)piperidin-1-yl]benzoate 392690-99-2P, Methyl 4-(4-formylpiperidin-1-yl)benzoate 392691-00-8P, Methyl 4-[4-(dimethoxymethyl)piperidin-1-yl]benzoate 392691-01-9P, [[1-[4-[Amino(hydroxyimino)methyl]phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-02-0P, 1-(7-Trifluoromethyl-4-quinolyl)piperidine-4-carboxamide 392691-03-1P, 4-Aminomethyl-1-(7-trifluoromethyl-4-quinolyl)piperidine 392691-04-2P, 4-Aminomethyl-1-(4-trifluoromethyl-2-pyridyl)piperidine 392691-05-3P, 4-Aminomethyl-1-propylpiperidine 392691-06-4P, 1-(3,3,3-Trifluoropropyl)piperidine-4-carboxamide 392691-07-5P, 4-Aminomethyl-1-(3,3,3-trifluoropropyl)piperidine 392691-08-6P, 1-(4,4,4-Trifluorobutyl)piperidine-4-carboxamide 392691-09-7P, 4-Aminomethyl-1-(4,4,4-trifluorobutyl)piperidine 392691-10-0P, 1-Octylpiperidine-4-carboxamide 392691-11-1P, 4-Aminomethyl-1-octylpiperidine 392691-12-2P, 1-Tridecylpiperidine-4-carboxamide 392691-13-3P, 4-Aminomethyl-1-tridecylpiperidine 392691-14-4P, 1-Pentadecylpiperidine-4-carboxamide 392691-15-5P, 4-Aminomethyl-1-pentadecylpiperidine 392691-16-6P, 1-(12-Hydroxydodecyl)piperidine-4-carboxamide 392691-17-7P, 4-Aminomethyl-1-(12-hydroxydodecyl)piperidine 392691-18-8P, 4-Carbamoyl-1-piperidinyl 2-naphthyl sulfone 392691-19-9P, 4-Aminomethyl-1-piperidinyl 2-naphthyl sulfone 392691-20-2P, 4-Carbamoyl-1-piperidinyl propan-2-yl sulfone 392691-21-3P,

4-Aminomethyl-1-piperidinyl propane-2-yl sulfone 392691-22-4P,
 4-Aminomethyl-1-piperidinyl 4-methoxyphenyl sulfone 392691-23-5P,
 4-Carbamoyl-1-piperidinyl 3,4-dimethoxyphenyl sulfone 392691-24-6P,
 4-Aminomethyl-1-piperidinyl 3,4-dimethoxyphenyl sulfone 392691-25-7P,
 4-Aminomethyl-1-piperidinyl 4-trifluoromethoxyphenyl sulfone
 392691-26-8P, [[1-(4-Trifluoromethoxybenzenesulfonyl)piperidin-4-
 yl]methyl]carbamic acid tert-butyl ester 392691-27-9P,
 4-Aminomethyl-1-piperidinyl 4-trifluoromethoxyphenyl sulfone
 trifluoroacetate 392691-28-0P, [[1-((1-Methyl-1H-imidazol-4-
 yl)sulfonyl)piperidin-4-yl]methyl]amine 392691-29-1P,
 [[1-((1-Methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-yl]methyl]carbamic
 acid tert-butyl ester 392691-30-4P, N-(3-Ethoxycarbonylphenyl)-4-
 carbamoyl-1-piperidinecarboxamide 392691-31-5P, N-(3-
 Ethoxycarbonylphenyl)-4-(aminomethyl)-1-piperidinecarboxamide
 392691-32-6P, 3-[[4-[[[(2S)-2-Benzyl]oxy-3-(4-hydroxyphenoxy)propyl]amino]m
 ethyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392691-33-7P,
 N-(4-Ethoxycarbonylphenyl)-4-carbamoyl-1-piperidinecarboxamide
 392691-34-8P, N-(4-Ethoxycarbonylphenyl)-4-(aminomethyl)-1-
 piperidinecarboxamide 392691-35-9P, 4-[[4-[[[(2S)-2-Hydroxy-3-(4-
 benzyl]oxyphenoxy)propyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic
 acid ethyl ester 392691-36-0P, N-Hexyl-4-carbamoyl-1-
 piperidinecarboxamide 392691-37-1P, N-Hexyl-4-(aminomethyl)-1-
 piperidinecarboxamide 392691-38-2P, N-Cyclohexyl-4-(aminomethyl)-1-
 piperidinecarboxamide 392691-39-3P, 1-[4-[(4-Carbamoylpiperidin-1-
 yl)sulfonyl]phenyl]-3-hexylurea 392691-40-6P, 1-[4-[(4-
 (Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-hexylurea 392691-41-7P,
 1-[4-[(4-Carbamoylpiperidine-1-sulfonyl)phenyl]-3-phenylurea
 392691-42-8P, 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-
 phenylurea 392691-43-9P, 1-[4-[(4-(Aminomethyl)piperidin-1-
 yl)sulfonyl]phenyl]-3-cyclohexylurea 392691-44-0P, 1-[4-[(4-
 (Aminomethyl)piperidin-1-yl)sulfonyl]phenyl]-3-isobutylurea
 392691-45-1P, 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-(2-
 pyridyl)urea 392691-46-2P, [1-[[4-[(3-(2-Pyridyl)ureido)phenyl]sulfonyl]p
 iperidin-4-yl]carboxaldehyde 392691-47-3P, 1-[4-(4-Carbamoylpiperidine-1-
 sulfonyl)phenyl]-3-octylurea 392691-48-4P, 1-[4-[(4-
 (Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-octylurea 392691-49-5P,
 1-[4-[(4-(Hydroxymethyl)piperidine-1-sulfonyl)phenyl]-3-octylurea
 392691-50-8P, 1-[4-[(4-Formylpiperidine-1-sulfonyl)phenyl]-3-octylurea
 392691-51-9P, [[1-[[4-[[[3-(2-Thienyl)propyl]amino]carbonyl]amino]phenyl]
 sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester
 392691-52-0P, 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-(
 thiophen-2-yl)propyl]urea 392691-53-1P, 1-[4-[(4-(Aminomethyl)piperidine-
 1-sulfonyl)phenyl]-3-(2,5-difluorobenzyl)urea 392691-54-2P,
 1-[2-(2,5-Difluorophenyl)ethyl]-3-[4-[(4-(dimethoxymethyl)piperidine-1-
 sulfonyl)phenyl]urea 392691-55-3P, 1-[2-(2,5-Difluorophenyl)ethyl]-3-[4-
 (4-formylpiperidine-1-sulfonyl)phenyl]urea 392691-56-4P,
 [[1-[4-[(3-(2,6-Difluorophenyl)ureido)benzenesulfonyl]piperidin-4-
 yl]methyl]carbamic acid tert-butyl ester 392691-57-5P,
 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-(2,6-
 difluorophenyl)urea 392691-58-6P, N-Isopropyl-2,6-difluorobenzamide
 392691-59-7P, 2,6-Difluoro-N-isopropylbenzylamine 392691-60-0P,
 1-(2,6-Difluorobenzyl)-3-[4-[(4-(dimethoxymethyl)piperidine-1-
 sulfonyl)phenyl]-1-isopropylurea 392691-61-1P, 1-(2,6-Difluorobenzyl)-3-
 [4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-isopropylurea 392691-62-2P,
 2,6-Difluoro-N-methylbenzylamine 392691-63-3P, 1-(2,6-Difluorobenzyl)-3-
 [4-(4-(dimethoxymethyl)piperidine-1-sulfonyl)phenyl]-1-methylurea
 392691-64-4P, 1-(2,6-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-

sulfonyl)phenyl]-1-methylurea 392691-65-5P, 2,5-Difluoro-N-isopropylbenzamide 392691-66-6P, 2,5-Difluoro-N-isopropylbenzylamine 392691-67-7P, 1-(2,5-Difluorobenzyl)-3-[4-[4-(dimethoxymethyl)piperidine-1-sulfonyl]phenyl]-1-isopropylurea 392691-68-8P, 1-(2,5-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-isopropylurea 392691-69-9P, 2,5-Difluoro-N-methylbenzamide 392691-70-2P, 2,5-Difluoro-N-methylbenzylamine 392691-71-3P, 1-(2,5-Difluorobenzyl)-3-[4-(4-dimethoxymethylpiperidine-1-sulfonyl)phenyl]-1-methylurea 392691-72-4P, 1-(2,5-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-methylurea 392691-73-5P, [4-[[3-[4-[4-(Dimethoxymethyl)piperidine-1-sulfonyl)phenyl]ureido]methyl]-3-fluorophenoxy]acetic acid methyl ester 392691-74-6P, [4-[[3-[4-(4-Formylpiperidine-1-sulfonyl)phenyl]ureido]methyl]-3-fluorophenoxy]acetic acid methyl ester 392691-75-7P, [[1-[4-(Heptanamido)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-76-8P, N-[4-[[4-(Aminomethyl)-1-piperidinyl]sulfonyl]phenyl]heptanamide 392691-77-9P, [[1-[4-[(2,6-Difluorobenzyl)amino]carbonyl]benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-78-0P, 4-[4-(Aminomethyl)piperidinyl-1-sulfonyl]-N-(2,6-difluorobenzyl)benzamide 392691-79-1P, [[1-[[4-[(1H-Indazol-3-yl)carbonyl]amino]phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-80-4P, 1H-Indazole-3-carboxylic acid [4-[(4-(aminomethyl)-1-piperidinyl)sulfonyl]phenyl]amide 392691-81-5P, [[1-[4-(Pyrazol-1-yl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-82-6P, 4-(Aminomethyl)-1-piperidinyl 4-(pyrazol-1-yl)phenyl sulfone 392691-83-7P, 4-(3-Methyl-2-oxoimidazolidin-1-yl)benzenesulfonyl chloride 392691-84-8P, [[1-[4-(3-Methyl-2-oxoimidazolidin-1-yl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-85-9P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-methylimidazolidin-2-one 392691-86-0P, [1-[4-[2-(Ethoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-87-1P, [1-[4-[2-(Ethoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-88-2P, [1-[4-[3-[(Ethoxycarbonyl)methyl]indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-89-3P, [1-[4-[3-[(Ethoxycarbonyl)methyl]indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-90-6P, [1-[4-(4-Methoxycarbonylindol-1-yl)benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-91-7P, [1-[4-[4-(Methoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-92-8P, [1-[4-[4-(Ethoxycarbonyl)pyrazol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-93-9P, [1-[4-(4-Ethoxycarbonylpyrazol-1-yl)benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-94-0P, [[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-95-1P, [[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]amine 392691-96-2P, [1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]carboxaldehyde dimethyl acetal 392691-97-3P, [1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]carboxaldehyde 392691-98-4P, 3-[3-[4-[(4-(Dimethoxymethyl)-1-piperidinyl)sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester 392691-99-5P, 3-[3-[4-[(4-Formyl-1-piperidinyl)sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester 392692-00-1P, [1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinyl]methanol 392692-01-2P, [1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinyl]carboxaldehyde 392692-02-3P, 1-(5-Methoxycarbonyl-2-pyridyl)-

4-formylpiperidine 392692-03-4P, 1-(5-Methoxycarbonyl-2-pyridyl)-4-formylpiperidine dimethyl acetal 392692-04-5P, (2S)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-05-6P, (2S)-2-[[4-[4-(Formyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-06-7P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-07-8P, (2S)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid methyl ester 392692-08-9P, (2S)-2-[[4-(4-Formylpiperidin-1-yl)benzoyl]amino]-3-phenylpropanoic acid methyl ester 392692-09-0P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid methyl ester 392692-10-3P, (2R)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-11-4P, (2R)-2-[[4-[4-(Formyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-12-5P, (2R)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-13-6P, (2S)-1-[[4-(4-Dimethoxymethylpiperidine-1-sulfonyl)phenyl]carbamoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-14-7P, (2S)-1-[[4-(4-Formylpiperidine-1-sulfonyl)phenyl]carbamoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-15-8P, (2S)-2-[[3-[[4-(4-Dimethoxymethylpiperidine-1-sulfonyl)phenyl]ureido]-3-phenylpropionic acid benzyl ester 392692-16-9P, (2S)-2-[[3-[[4-(4-Formylpiperidine-1-sulfonyl)phenyl]ureido]-3-phenylpropionic acid benzyl ester 392692-17-0P, (2S)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-18-1P, (2S)-2-[[4-[4-(Formyl)piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-19-2P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-20-5P, (2S)-1-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-21-6P, (2S)-1-[[4-(4-Formylpiperidin-1-yl)benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-22-7P, (2S)-1-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-23-8P, [[(2-Amino-3-nitrobenzyl)methoxy]-S-oxirane 392692-24-9P, [[1-(4-Nitrobenzenesulfonyl)piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392692-34-1P, [[1-((1-Methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-yl]methyl]amine trifluoroacetate 392692-35-2P, 1-[[4-[[4-(Aminomethyl)piperidin-1-yl]sulfonyl]phenyl]-3-isobutylurea trifluoroacetate 392692-36-3P, 1-[[4-[[4-(Aminomethyl)piperidin-1-yl]sulfonyl]phenyl]-3-(2-pyridyl)urea trifluoroacetate 392692-37-4P, 1-[[4-[[4-[[[(2S)-2-Hydroxy-3-((tert-butyldiphenylsilyloxy)phenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-pyridin-2-ylurea 392692-41-0P, 1-[[4-[[4-[[[(2S)-2-Hydroxy-3-((8-benzyloxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yl)oxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392692-42-1P, 1-[[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-[(3-(2-thienyl)propyl)urea formate salt 392692-46-5P, 1H-Indazole-3-carboxylic acid [4-[[4-(aminomethyl)-1-piperidinyl]sulfonyl]phenyl]amide formate salt 392692-49-8P, [[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]amine formate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(intermediate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

- IT 93-11-8, 2-Naphthylsulfonyl chloride 98-68-0, 4-Methoxybenzenesulfonyl chloride 6457-49-4, 4-Hydroxymethylpiperidine 23095-31-0, 3,4-Dimethoxybenzenesulfonyl chloride
 RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
 (precursor and combinatorial reactant; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 75-30-9, 2-Iodopropane 75-31-0, Isopropylamine, reactions 78-81-9, Isobutylamine 96-32-2, Methyl bromoacetate 98-74-8, 4-Nitrobenzenesulfonyl chloride 100-39-0, Benzyl bromide 100-52-7, Benzaldehyde, reactions 103-16-2, 4-Benzylxyphenol 103-71-9, Phenyl isocyanate, reactions 107-08-4, 1-Iodopropane 108-91-8, Cyclohexylamine, reactions 110-89-4, Piperidine, reactions 111-85-3, Octyl chloride 111-86-4, 1-Octylamine 142-04-1, Aniline hydrochloride 288-13-1, Pyrazole 346-55-4, 4-Chloro-7-trifluoromethylquinoline 349-88-2, 4-Fluorobenzenesulfonyl chloride 367-12-4, 2-Fluorophenol 385-00-2, 2,6-Difluorobenzoic acid 451-46-7, Ethyl 4-fluorobenzoate 460-37-7, 3,3,3-Trifluoropropyl iodide 461-17-6, 4,4,4-Trifluorobutyl iodide 504-29-0, 2-Aminopyridine 603-85-0, 2-Amino-3-nitrophenol 628-17-1, 1-Iodopentane 629-27-6, 1-Iodoctane 629-72-1, 1-Bromopentadecane 638-45-9, 1-Iodohexane 764-85-2, Nonanoyl chloride 765-09-3, 1-Bromotridecane 778-82-5, 3-[*(Ethoxycarbonyl)methyl*]indole 1490-25-1, Methyl 4-chloro-4-oxobutanoate 1953-54-4, 5-Hydroxyindole 1986-00-1, 4-Hydroxy-9-fluorenone 2133-40-6, L-Proline methyl ester hydrochloride 2380-94-1, 4-Hydroxyindole 2462-32-0, L-Phenylalanine benzyl ester hydrochloride 2525-62-4, n-Hexyl isocyanate 2528-61-2, Heptanoyl chloride 2743-40-0, L-Leucine ethyl ester hydrochloride 2886-33-1, S-Aspartic acid dibenzyl ester p-tosylate 2991-28-8, 2,5-Difluorobenzoic acid 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate 3344-77-2 3770-50-1, 2-Ethoxycarbonylindole 4079-64-5, (*R*)-Aspartic acid dibenzyl ester p-tosylate 4498-67-3, 1*H*-Indazole-3-carboxylic acid 4653-11-6, 4-(2-Thienyl)butanoic acid 4837-88-1, 2-Methoxy-6-nitrotoluene 5509-65-9, 2,6-Difluoroaniline 6322-56-1, 4-Hydroxy-3-nitroacetophenone 6344-60-1, 1-Hydroxy-9-fluorenone 7144-05-0, 4-(Aminomethyl)piperidine 7524-50-7, L-Phenylalanine methyl ester hydrochloride 10147-37-2, Isopropylsulfonyl chloride 14347-08-1, 5-Acetyl-2-benzylxymethanesulfonanilide 19836-78-3, 3-Methyl-2-oxazolidinone 30806-83-8, 4-Ethoxycarbonylphenyl isocyanate 35320-67-3, 2-Methyl-4-hydroxyindole 37622-90-5, Ethyl pyrazole-4-carboxylate 39546-32-2, Isonipeptamide 39830-66-5, 4-Methoxycarbonylindole 52602-39-8, 4-Hydroxycarbazole 56962-11-9, 2-Chloro-4-hydroxybenzaldehyde 57044-25-4, (*R*)-(+)-Glycidol 58479-61-1, tert-Butylchlorodiphenylsilane 61306-74-9, 5,8-Dimethoxy-3,4-dihydro-2(*H*)-quinolinone 62119-49-7, 4-(2-Oxiranylmethoxy)-2-indolecarboxamide 62600-71-9, 2-(3-Chlorophenyl)-(2*R*)-oxirane 62992-68-1, 1-Benzylisonipeptamide 67531-68-4, 3-Ethoxycarbonylphenyl isocyanate 69385-30-4, 2,6-Difluorobenzylamine 73781-91-6, Methyl 6-chloronicotinate 82380-18-5, 2-Fluoro-4-hydroxybenzonitrile 85118-06-5, 2,5-Difluorobenzylamine 94108-56-2, 4-Trifluoromethoxybenzenesulfonyl chloride 115314-14-2, (*S*)-(+)-Glycidyl 3-nitrobenzenesulfonate

118712-60-0, (S)-Glycidyl nosylate 130408-15-0, 3-(2,5-Difluorophenyl)propionic acid 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride 173901-02-5, 4-(3-Hexylureido)benzenesulfonyl chloride 392692-25-0, [[1-[(4-Cyanophenyl)sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392692-28-3, 1-(4-Trifluoromethyl-2-pyridyl)piperidine-4-carboxamide 392692-29-4, 4-Aminomethyl-1-piperidinyl 4-methoxyphenyl sulfone trifluoroacetate 392692-38-5, 2-(7-Methanesulfonamido-1H-indol-5-yl)-2-hydroxyethylamine 392692-43-2, N-[4-[[4-(Aminomethyl)-1-piperidinyl]sulfonyl]phenyl]-N'-(2,5-difluorobenzyl)urea formate 392692-44-3, 1-[4-[[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-(2,4-difluorophenethyl)urea 392692-45-4, [[1-[(4-Hydroxycarbonyl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392692-50-1, 4-[[4-(Dimethoxymethyl)-1-piperidinyl]sulfonyl]-N-hydroxybenzenecarboximidamide 392692-51-2, 3-[3-[4-[[4-[[[2S]-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)
(precursor; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 9004-10-8, Insulin, biological studies

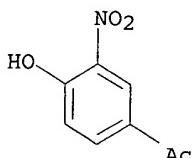
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone

RL: RCT (Reactant); RACT (Reactant or reagent)
(precursor; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



IT 9004-10-8, Insulin, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(resistance, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

RN 9004-10-8 HCPLUS

CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L130 ANSWER 9 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:72044 HCPLUS

DOCUMENT NUMBER: 136:134675
 TITLE: Preparation of heterocyclic amino alcohol beta-3 adrenergic receptor agonists
 INVENTOR(S): Ashwell, Mark Anthony; Solvibile, William Ronald; Quagliato, Dominick Anthony; Molinari, Albert John
 PATENT ASSIGNEE(S): American Home Products Corporation, USA
 SOURCE: PCT Int. Appl., 208 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002006229	A2	20020124	WO 2001-US22327	20010716 <--
WO 2002006229	A3	20020725		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU; ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002028832	A1	20020307	US 2001-903841	20010712 <--
US 6451814	B2	20020917		
US 2003018045	A1	20030123	US 2002-189312	20020702 <--
US 6605618	B2	20030812		
PRIORITY APPLN. INFO.:			US 2000-218628P	P 20000717 <--
			US 2001-903841	A1 20010712 <--

ED Entered STN: 25 Jan 2002

AB This invention provides A-U-CH(OH)CH₂NHCH₂CH₂VC₆H₄WZ-p (1; Z = (1-Y-X-substituted piperidin-4-yl)) or a pharmaceutically acceptable salt thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes. β₃-Adrenergic receptor EC₅₀ and maximal response (IA; % activity compound/% activity isoproterenol) values are reported for .apprx.100 example compds., e.g. 0.032 μM and 1.04 for 4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,6-difluorobenzylamide. In 1, A is (a) a 5-6 membered heterocyclic ring having 1-4 heteroatoms selected from O, N, and S, substituted with (R₁)_m; (b) a Ph ring substituted with (R₁)_m; (c) a naphthyl ring substituted with (R₁)_m; or (d) a Ph fused heterocycle selected from (R₁)_m-substituted 1,3-dihydro-2-oxo-2H-benzimidazol-4-yl, 1,3-benzodioxol-5-yl, 1,2,3,4-tetrahydro-2-oxoquinolin-5-yl, 1,2,3,4-tetrahydro-1-naphthylideneamino. U is -OCH₂- or a bond; V is O or a bond; W is O, S(O)_a, NR₂, NC(O)R₂; X = SO₂, C(O), -(CH₂)_b, a bond, Ar; Y is -NR₃R₄, Het, Ar, alkyl of 1-8 C atoms, O(CH₂)_dR₅. R₁ is alkyl of 1-8 C atoms, -OR₆, halogen, cyano, cycloalkyl of 3-8 C atoms, trifluoromethyl, CO₂R₆, -NR₆R₇, -C(O)NR₆R₇, -NHC(O)R₆, -NR₆C(O)NR₈R₈, -NHSO₂R₈, -S(O)aR₆, -NO₂, -O(CH₂)eCO₂R₇, -OC(O)NR₆R₇, -O(CH₂)fOR₆, or a 5-6 membered

heterocyclic ring containing 1 to 4 heteroatoms selected from O, S, and N. R2 is H, alkyl of 1-8 C atoms, or arylalkyl having 1-8 C atoms in the alkyl moiety; R3 and R4 are each, independently, H, alkyl of 1-8 C atoms, cycloalkyl of 3-8 C atoms, arylalkyl having 1-8 C atoms in the alkyl group, -(CH₂)_gR9, -(CH₂)_hCOR9, -(CH₂)_jCR10R11(CH₂)_jR9, or -(CH₂)_kCONR12R13; or R3 and R4 may be taken together together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S, and said heterocycle may optionally be substituted with R14. R5 is H; alkyl of 1-8 C atoms optionally substituted by 1-3 substituents selected from hydroxy, halogen and aryl; cycloalkyl of 1-8 C atoms; Ar or Het; R6, R7, and R8 are each, independently, H, or alkyl of 1-8 C atoms, or aryl of 6-10 C atoms, cycloalkyl of 3-8 C atoms, or arylalkyl having 1-8 C atoms in the alkyl moiety; R9 is H; alkyl optionally substituted with 1-3 substituents selected from hydroxy, halogen, and aryl; cycloalkyl of 3-8 C atoms; Ar, or Het; R10 and R11 are each, independently, H, alkyl, or aryl optionally substituted with alkyl of 1-8 C atoms or halogen; or R10 and R11 are taken together to form a spiro fused cycloalkyl ring of 3-8 C atoms. R12 and R13 are each, independently, H, alkyl of 1-8 C atoms, aryl optionally substituted with alkyl of 1-8 C atoms or halogen; or R12 and R13 are taken together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S, and said heterocycle may optionally be substituted with R14; R14 is CO₂R15 or aryl optionally substituted with a 1-3 substituents selected from -OR15 and cycloalkyloxy of 3-8 C atoms; R15 is alkyl of 1-8 C atoms or arylalkyl having 1-8 C atoms in the alkyl moiety. Ar is an aromatic ring system containing 1-2 carbocyclic aromatic rings

having 6-10 C atoms optionally mono, di, or trisubstituted with R16; Het is (a) a 5-6 membered heterocyclic ring having 1-4 heteroatoms selected from O, S, and N which may be optionally mono- or disubstituted with R16; or (b) a heterocyclic ring system optionally mono- or disubstituted by R16 containing a 5-6 membered heterocyclic ring fused to one or two carbocyclic or heterocyclic rings such that the heterocyclic ring system contains 1-4 heteroatoms selected from O, S, and N; R16 is aryl, halogen, alkyl of 1-8 C atoms, -OR17, cycloalkyl of 3-8 C atoms, trifluoromethyl, cyano, -CO₂R17, -CONR17R18, -SO₂NR17R18, -NR17OR18, -NR19CONR17R18, -NR17COR18, -NO₂, -O(CH₂)_pCO₂R17, -OCONR17R18, -S(O)_nR17, -O(CH₂)_qOR17, or a 5-6 membered heterocyclic ring containing 1-4 heteroatoms selected from O, S and N. R17, R18, and R19 are each, independently, H, alkyl of 1-8 C atoms, arylalkyl having 1-8 C atoms in the alkyl moiety, or aryl optionally mono, di, or trisubstituted with halogen, cyano, nitro, hydroxy, alkyl of 1-8 C atoms, or alkoxy of 1-8 C atoms; or when R17 and R18 are contained on a common N, R17 and R18 may be taken together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S. A = 0-2; b = 1-6; d = 0-3; e = 1-6; f = 1-6; g = 0-6; h = 0-6; j = 0-6; k = 0-6; m = 0-2; p = 1-6; q = 1-6. Methods of preparation are claimed, comprising (a) reacting AOCH₂-substituted oxirane or a protected form thereof in which a reactive substituent group is protected, with H₂NCH₂CH₂VC₆H₄WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 (U = -OCH₂-). (b) reacting A-substituted oxirane or a protected form thereof in which any reactive substituent group is protected, with H₂NCH₂CH₂VC₆H₄WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U represents a bond;. (c) reacting

ACH(OPr)CH₂I, wherein Pr is a protecting group, with H₂NCH₂CH₂VC₆H₄WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U = -OCH₂-.

(d) reacting ACH(OH)CH₂NH₂ or a protected form thereof in which any reactive substituent group is protected, with HO₂CCH₂VC₆H₄WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U = -OCH₂-.

(e) removing any protecting group from 1 in which at least one substituent carries a protecting group to give 1; or (f) converting a basic compound 1 to a salt thereof by reaction with a pharmaceutically acceptable acid; or (g) converting 1 having one or more reactive substituent groups to a different 1; or (h) isolating an isomer of 1 from a mixture thereof. More than 100 example preps. are included.

IC ICM C07D211-00

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 18, 63

ST heterocyclic beta 3 adrenergic receptor agonist prepn activity use;
diabetes drug heterocyclic beta 3 adrenergic receptor agonist;
 atherosclerosis drug heterocyclic beta 3 adrenergic receptor agonist;
 gastrointestinal disorder drug heterocyclic beta 3 adrenergic receptor agonist; neurogenic inflammation drug heterocyclic beta 3 adrenergic receptor agonist; glaucoma drug heterocyclic beta 3 adrenergic receptor agonist; ocular hypertension drug heterocyclic beta 3 adrenergic receptor agonist; frequent urination drug heterocyclic beta 3 adrenergic receptor agonist; lean meat enhancer heterocyclic beta 3 adrenergic receptor agonist; amino alc urea heterocyclic beta3 adrenergic receptor agonist prepn

IT Bladder, disease

(incontinence; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for treatment or inhibition of)

IT Antidiabetic agents

(type II; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)

IT 51-67-2, Tyramine 70-11-1, 2-Bromo-1-phenyl-1-ethanone 89-99-6,
 2-Fluorobenzylamine 95-00-1, 2,4-Dichlorobenzylamine 96-32-2, Methyl
 bromoacetate 100-01-6, 4-Nitroaniline, reactions 100-02-7,
 4-Nitrophenol, reactions 100-27-6, 2-(4-Nitrophenyl)-1-ethanol
 100-39-0, Benzyl bromide 100-82-3, 3-Fluorobenzylamine 102-49-8,
 3,4-Dichlorobenzylamine 103-16-2, 4-Benzoyloxyphenol 103-71-9, Phenyl
 isocyanate, reactions 108-46-3, Resorcinol, reactions 109-00-2,
 3-Hydroxypyridine 109-90-0, Ethyl isocyanate 110-91-8, Morpholine,
 reactions 111-26-2, Hexylamine 111-86-4, Octylamine 121-60-8,
 4-(Acetylamino)benzenesulfonyl chloride 140-75-0, 4-Fluorobenzylamine
 140-89-6, Potassium ethyl xanthate 142-61-0, Hexanoyl chloride
 177-11-7, 1,4-Dioxa-8-azaspiro[4.5]decane 288-13-1, Pyrazole 349-88-2,
 4-Fluorobenzenesulfonyl chloride 367-12-4, 2-Fluorophenol 371-40-4,
 4-Fluoroaniline 371-41-5, 4-Fluorophenol 404-70-6,
 3-Fluorophenethylamine 451-46-7, Ethyl 4-fluorobenzoate 459-19-8,
 4-Fluorophenethylamine hydrochloride 459-56-3, (4-Fluorophenyl)methanol
 532-55-8, Benzoyl isothiocyanate 533-31-3, Sesamol 603-85-0,
 2-Amino-3-nitrophenol 606-83-7, 3,3-Diphenylpropionic acid 621-42-1,
 N-(3-Hydroxyphenyl)acetamide 646-07-1, 4-Methylvaleric acid 753-90-2,
 2,2,2-Trifluoroethylamine 771-50-6, 1H-Indole-3-carboxylic acid
 932-96-7, N-Methyl-4-chloroaniline 1123-00-8, 2-Cyclopentylacetic acid
 1126-09-6, Ethyl isonipecotate 1145-15-9, 5-(3,4-
 Dimethoxyphenyl)pentanoic acid 1197-55-3, 2-(4-Aminophenyl)acetic acid

1477-50-5, 1H-Indole-2-carboxylic acid 1484-26-0, 3-(Benzylxy)aniline
 1611-57-0, 1,1,3,3-Tetramethylbutyl isocyanate 1679-64-7,
 4-(Methoxycarbonyl)benzoic acid 1745-81-9, 2-Allylphenol 1795-48-8,
 Isopropyl isocyanate 2039-67-0, 3-Methoxyphenethylamine 2104-19-0,
 9-Methoxy-9-oxononanoic acid 2150-46-1, Methyl 2,5-dihydroxybenzoate
 2525-62-4, Hexyl isocyanate 2577-48-2, Methyl (2S)-2-
 pyrrolidinecarboxylate 2812-46-6, tert-Butyl (2S)-2-
 pyrrolidinecarboxylate 3048-01-9, 2-Trifluoromethylbenzylamine
 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate
 3612-20-2, 1-Benzyl-4-piperidone 4124-41-8 4382-54-1,
 5-Methoxy-1H-indole-2-carboxylic acid 4393-09-3, 2,3-
 Dimethoxybenzylamine 4441-63-8, 4-Cyclohexylbutanoic acid 4498-67-3,
 1H-Indazole-3-carboxylic acid 4521-22-6, 4-(p-Tolyl)butyric acid
 4619-20-9, 3-(4-Methylbenzoyl)propionic acid 4653-11-6,
 4-(2-Thienyl)butyric acid 5006-62-2, Ethyl 3-piperidinecarboxylate
 5071-96-5, 3-Methoxybenzylamine 5382-16-1, 4-Hydroxypiperidine
 5597-50-2, Methyl 3-(4-hydroxyphenyl)propanoate 6053-58-3,
 3-Cyclopentylpropylamine 6322-56-1, 4-Hydroxy-3-
 nitroacetophenone 6373-46-2, 4-(Phenylmethoxy)benzenamine 6960-45-8,
 7-Nitro-1H-indole-2-carboxylic acid 7254-19-5, 5-Bromo-1H-indole-2-
 carboxylic acid 7693-46-1, 4-Nitrophenyl chloroformate 7795-95-1,
 1-Octanesulfonyl chloride 13472-00-9, 4-(2-Aminoethyl)aniline
 18162-48-6, tert-Butyldimethylchlorosilane 19354-50-8,
 3-Methoxybenzo[b]thiophene-2-carboxylic acid 23806-24-8,
 3-Methyl-2-thiophenecarboxylic acid 28315-93-7, 5-Hydroxy-3,4-dihydro-
 1(2H)-naphthalenone 29968-78-3, 4-Nitrophenethylamine hydrochloride
 56962-11-9, 2-Chloro-4-hydroxybenzaldehyde 58479-61-1,
 tert-Butylchlorodiphenylsilane 61306-74-9, 5,8-Dimethoxy-3,4-dihydro-
 2(1H)-quinolinone 62600-71-9, (2R)-2-(3-Chlorophenyl)oxirane
 64740-36-9, 3-(4-Ethylphenyl)propionic acid 69385-30-4,
 2,6-Difluorobenzylamine 69812-29-9, 2-Acetamido-4-methyl-5-
 thiazolesulfonyl chloride 70987-78-9, (S)-(+)-Glycidyl
 4-methylbenzenesulfonate 72235-52-0, 2,4-Difluorobenzylamine
 75637-30-8, 5-Acetyl-2-(phenylmethoxy)benzamide 75853-20-2,
 2,5-Difluorobenzyl alcohol 82380-18-5, 2-Fluoro-4-hydroxybenzonitrile
 85118-06-5, 2,5-Difluorobenzylamine 97801-56-4, (2S)-1-[(4-
 Fluorophenyl)sulfonyl]-2-pyrrolidinecarboxylic acid 105184-38-1,
 3,5-Difluorophenylacetic acid 115314-14-2, (2S)-Oxiranylmethyl
 3-nitrobenzenesulfonate 132740-43-3, 4-Fluorobenzyl isocyanate
 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride 160818-96-2,
 4-[3-(Cyclopentyloxy)-4-methoxyphenyl]piperidine 194853-86-6,
 4-Fluoro-2-(trifluoromethyl)benzonitrile 246262-20-4,
 N-[2-(Benzylxy)-5-((2S)-oxiranylmethoxy)phenyl]methanesulfonamide
 246262-39-5, N-[2-(Benzylxy)-5-[(1R)-2-iodo-1-
 [(triethylsilyl)oxy]ethyl]phenyl]methanesulfonamide 340756-75-4,
 N-[5-((1R)-2-Amino-1-hydroxyethyl)-2-hydroxyphenyl]methanesulfonamide
 391671-82-2, tert-Butyl[4-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane
 391671-98-0, 4-(Triisopropylsilyloxy)-3-methylphenol 391674-53-6,
 4-[(Hexylamino)carbonyl]amino]benzoic acid 392621-97-5,
 4-[4-(2-Aminoethyl)phenylamino]piperidine-1-carboxylic acid
 4-fluorobenzylamide 392622-28-5, 4-[4-(2-Aminoethyl)anilino]-N-octyl-1-
 piperidinecarboxamide 392622-46-7, 2-[(E)-2-(4-Nitrophenyl)diazaryl]-4-
 ((2S)-oxiranylmethoxy)pyridine 392623-39-1, 4-[4-(2-Aminoethyl)anilino]-
 N-ethyl-1-piperidinecarboxamide formate 392627-94-0,
 4-[4-(2-Aminoethyl)anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide
 392629-65-1, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-hexyl-1-
 piperidinecarboxamide 392634-22-9, 3-{2-Methoxy-4-(3-

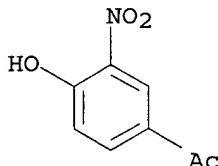
phenoxypropoxy)phenyl]propanoic acid 392636-78-1 392637-74-0,
 [2-[4-[1-[4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]amine formate 392638-32-3,
 [2-[4-[1-(4-Morpholin-4-yl-4-oxobutyryl)piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392638-51-6,
 [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-2-yl)methanone 392641-11-1, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl][(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 10 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:828897 HCPLUS

DOCUMENT NUMBER: 134:4941

TITLE: Preparation of 2,3-dihydro-1,4-benzoxazine derivatives as phosphodiesterase 4 inhibitors

INVENTOR(S): Takahashi, Kazunobu; Suzuki, Makoto; Kageyama, Shigeki; Takeshita, Yumiko; Nishikawa, Naoyuki; Nagai, Hiroichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000327663	A2	20001128	JP 1999-143904	19990524 <--
PRIORITY APPLN. INFO.:			JP 1999-143904	19990524 <--

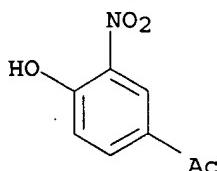
OTHER SOURCE(S): MARPAT 134:4941

ED Entered STN: 28 Nov 2000

AB The title compds. [I; R₁, R₂ = H, (un)substituted C₁-6 alkyl, cyano, (CO)_nA; wherein A = (un)substituted C₁-6 alkoxy, aryloxy, or NH₂, etc.; n = 0,1; or R₁ and R₂ are linked to each other to form (un)substituted ring; R₃, R₄, R₅ = halo, NO₂, cyano, (un)substituted C₁-6 alkylsulfonyl, arylsulfonyl, or heterocyclsulfonyl, etc.; or R₃ and R₄ or R₄ and R₅ are linked to each other to form (un)substituted ring; R₆ = cyano, (CO)p-GR₁₂; wherein G = single bond, O, (un)substituted NH; R₁₂ = H, (un)substituted

C1-6 alkyl, aryl, or heterocyclyl, etc.; p = 0,1; R7a = H or R7a and R7b together represent O; when R7a = H, R7b = cyano, (CO)p-YR13; wherein Y = single bond, O, (un)substituted NH; R13 = H, (un)substituted C1-6 alkyl, aryl, or heterocyclyl, etc.; q = 0,1; R8 = H, (un)substituted C1-6 alkyl, aryl, or heterocyclyl, C1-6 alkylsulfonyl, or arylsulfonyl; R9 = H, (un)substituted C1-10 alkyl, aryl, heterocyclyl, or C1-6 alkylsulfonyl, or arylsulfonyl; X = O, S, CH₂, (un)substituted NH, CO] are prepared. These compds. are useful as antiasthmatics or bronchodilators. Thus, 3,4-dimethoxyphenethyl tosylate (preparation given) and K₂CO₃ were added to 3,4-dihydro-2H-3,4-benzoxazine (preparation given) in toluene and refluxed to give 65% 4-(3,4-dimethoxyphenethyl)-2H-3,4-dihydro-1,4-benzoxazine (II). II and 4-(3,4-dimethoxyphenethyl)-7-[4-(3,4-dimethoxyphenethyl)-2H-3,4-dihydro-1,4-benzoxazin-7-yl]methyl]-2H-3,4-dihydro-1,4-benzoxazine showed IC₅₀ of 0.60±0.06 and 0.10±0.001 μM, resp., against phosphodiesterase 4.

- IC ICM C07D215-06
 ICS A61K031-47; A61K031-498; A61K031-535; A61K031-5377; A61K031-5415;
 A61P001-00; A61P001-16; A61P003-10; A61P005-50; A61P007-00;
 A61P009-00; A61P009-04; A61P011-00; A61P011-04; A61P011-06;
 A61P013-12; A61P017-02; A61P017-06; A61P019-02
- CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s) : 1, 7
- IT 1835-02-5P, α-Bromo-3',4'-dimethoxyacetophenone 5330-66-5P,
 (o-Nitrophenoxy)acetone 5487-33-2P, 2-(3-Benzylloxy-4-methoxyphenyl)acetic acid 5735-53-5P, 3,4-Dihydro-2H-1,4-benzoxazine 5761-37-5P **6322-56-1P**, 2-Nitro-4-acetylphenol 6346-05-0P,
 3-Benzylloxy-4-methoxybenzaldehyde 17266-98-7P 20734-76-3P,
 4-Methoxy-2-aminophenol 21911-84-2P, 3-(Phenylamino)propanoic acid methyl ester 55733-81-8P, 2,3-Bis(3,4-dimethoxyphenyl)propanoic acid 65148-06-3P 75010-39-8P, 3,4-Dimethoxyphenethyl p-toluenesulfonate 115615-02-6P, 4-(Cyanomethyl)-3,4-dihydro-2H-1,4-benzoxazin-3-one 308851-55-0P 308851-56-1P 308851-57-2P 308851-58-3P 308851-59-4P 308851-60-7P 308851-61-8P 308851-62-9P 308851-63-0P 308851-64-1P 308851-65-2P 308851-66-3P 308851-67-4P, 6-Acetyl-3,4-dihydro-2H-1,4-benzoxazine 308851-68-5P 308851-69-6P 308851-70-9P 308851-71-0P 308851-72-1P 308851-73-2P 308851-74-3P 308851-75-4P 308851-76-5P 308851-77-6P 308851-78-7P 308851-79-8P 308851-80-1P 308851-81-2P 308851-82-3P 308851-83-4P 308851-84-5P 308851-85-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of dihydrobenzoxazine derivs. as phosphodiesterase 4 inhibitors, antiasthmatics, and bronchodilators)
- IT **6322-56-1P**, 2-Nitro-4-acetylphenol
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of dihydrobenzoxazine derivs. as phosphodiesterase 4 inhibitors, antiasthmatics, and bronchodilators)
- RN 6322-56-1 HCPLUS
- CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 11 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:143177 HCPLUS

DOCUMENT NUMBER: 135:107100

TITLE: Synthesis and bronchodilating activities of phenylethanamine derivatives

AUTHOR(S): Zhao, Dongmei; Guo, Qiuming; Cheng, Maosheng; Zhang, Yafang; Gan, Lelin; Wang, Minwei

CORPORATE SOURCE: Laboratory of Drug Synthesis, Shenyang Pharmaceutical University, Shenyang, 110015, Peop. Rep. China

SOURCE: Zhongguo Yaowu Huaxue Zazhi (2000), 10(4), 262-265

CODEN: ZYHZEF; ISSN: 1005-0108

PUBLISHER: Zhongguo Yaowu Huaxue Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 135:107100

ED Entered STN: 28 Feb 2001

AB Ten phenylethanamine derivs. were designed and synthesized from 4-benzyloxy-3-nitro- α -bromoacetophenone derivative by reductive cyclization with KBH₄ and ring-opening reaction with amines. The in vitro bronchodilating activity of the phenylethanamine derivs. were reported.

CC 25-7 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1

IT 99-92-3P 99-93-4P 6322-56-1P 14347-05-8P 43229-01-2P

51582-41-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and bronchodilating activities of phenylethanamine derivs.)

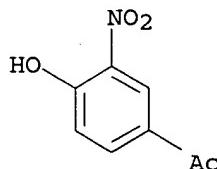
IT 6322-56-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

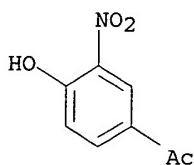
(synthesis and bronchodilating activities of phenylethanamine derivs.)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 12 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:589227 HCPLUS
 DOCUMENT NUMBER: 131:271559
 TITLE: Nitration and hydroxylation of substituted phenols by peroxy nitrite. Kinetic feature and an alternative mechanistic view
 AUTHOR(S): Nonoyama, Nobuaki; Chiba, Kazuhiko; Hisatome, Kaori; Suzuki, Hitomi; Shintani, Futoshi
 CORPORATE SOURCE: Department of Chemistry, School of Science, Kwansei Gakuin University, Uegahara, Nishinomiya, 662-8501, Japan
 SOURCE: Tetrahedron Letters (1999), 40(38), 6933-6937
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 21 Sep 1999
 AB The reaction of peroxy nitrite (ONOO-) with a series of p-substituted phenols was examined in aqueous phosphate buffer and MeCN solns. Major products were the corresponding 2-nitro derivative and the 4-substituted pyrocatechol. Kinetic study showed good correlation with Hammett σ_P parameters and reduction potentials, suggesting the possible one-electron transfer process involving the nitrosonium ion (NO⁺) as initial electrophile generated from peroxy nitrous acid.
 CC 22-4 (Physical Organic Chemistry)
 Section cross-reference(s): 1
 IT 88-75-5P, 2-Nitrophenol 89-64-5P, 2-Nitro-4-chlorophenol 99-42-3P, Benzoic acid, 4-hydroxy-, 3-nitro-, methyl ester 119-33-5P, 2-Nitro-4-methylphenol 120-80-9P, Catechol, properties 533-73-3P, 1,2,4-Trihydroxybenzene 1197-09-7P, Ethanone, 1-(3,4-dihydroxyphenyl)-1568-70-3P, 2-Nitro-4-methoxyphenol 2138-22-9P, 4-Chlorocatechol 2150-43-8P, Benzoic acid, 3,4-dihydroxy-, methyl ester 3934-97-2P, 4-Methoxypyrocatechol 6322-56-1P, Ethanone, 1-(4-hydroxy-3-nitrophenyl)-7693-52-9P, Phenol, 4-bromo-2-nitro-10463-20-4P, Benzeneacetic acid, 4-hydroxy-, 3-nitro 16090-33-8P, Nitrohydroquinone 17345-61-8P, 3,4-Dihydroxybenzonitrile 17345-77-6P, 4-Bromocatechol RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (nitration and hydroxylation of substituted phenols by peroxy nitrite)
 IT 6322-56-1P, Ethanone, 1-(4-hydroxy-3-nitrophenyl)- RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (nitration and hydroxylation of substituted phenols by peroxy nitrite)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L130 ANSWER 13 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:684268 HCAPLUS
 DOCUMENT NUMBER: 127:318773
 TITLE: Preparation of catecholamine surrogates for use as β3 adrenergic receptor agonists
 INVENTOR(S): Cheng, Peter T. W.; Bisacchi, Gregory S.; Gavai, Ashvinikumar V.; Poss, Kathleen M.; Ryono, Denis E.; Sher, Philip M.; Sun, Chong-qing; Washburn, William N.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
 SOURCE: PCT Int. Appl., 47 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9737646	A1	19971016	WO 1997-US5324	19970401 <-- VS 5770615
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9726013	A1	19971029	AU 1997-26013	19970401 <--
PRIORITY APPLN. INFO.:			US 1996-14861P	P 19960404 <--
			WO 1997-US5324	W 19970401 <--

OTHER SOURCE(S): MARPAT 127:318773

ED Entered STN: 29 Oct 1997

AB Amides I [R1 = alkyl, aryl, arylalkyl; R2 = H, OH, CH2OH, halogen; R3 = H, alkyl; R4 = R4' = H, alkoxy, alkoxyethyl, OH, CN, carboxamide, carboxyl, amino, acylamino, sulfonylamino; R4R4' = fused heterocycle; R5 = R5' = R5'' = H, alkyl, cycloalkyl, halogen, OH, aryl alkoxy, CN, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, acylamino, carbamoyl] were prep'd for use as β3 adrenergic receptor agonists (no data), and therefore, potentially useful for treatment of diseases such as diabetes, obesity and gastrointestinal diseases. Thus, amide II was prepared a multistep synthetic sequence including the preparation of Et (S)-α-amino-4-methoxy-α-methylbenzeneacetate starting from 4-methoxyacetophenone and the formation of 1-(4-phenylmethoxy-3-aminophenyl)ethanone starting from 4-hydroxyacetophenone.

IC ICM A61K031-18

ICS A61K031-42; A61K031-425

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1, 63

IT 98-18-0P	2015-19-2P	6274-18-6P	<u>6322-56-1P</u>	14347-05-8P
14347-08-1P	14347-15-0P	14347-25-2P	22927-78-2P	27958-77-6P
35582-07-1P	35582-08-2P	62345-76-0P	62882-08-0P	62882-11-5P
104139-11-9P	170687-75-9P	170687-82-8P	170689-16-4P	181513-08-6P
184097-39-0P	193017-26-4P	197643-49-5P	197643-97-3P	197643-98-4P
197643-99-5P	197644-01-2P	197644-02-3P	197644-03-4P	197644-04-5P
197644-05-6P	197644-06-7P	197644-07-8P	197644-08-9P	197644-09-0P
197644-10-3P	197644-11-4P	197644-12-5P	197644-13-6P	197644-14-7P

197644-15-8P

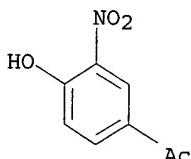
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of catecholamine surrogates useful as β_3 adrenergic receptor agonists)

IT **6322-56-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of catecholamine surrogates useful as β_3 adrenergic receptor agonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 14 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:640676 HCPLUS
 DOCUMENT NUMBER: 127:278309
 TITLE: Preparation of phosphorus containing aryloxy and arylthiopropanol amine derivatives useful as beta adrenoreceptor agonists
 INVENTOR(S): Morgan, Helen Kate Ann; Ward, Robert William; Thompson, Mervyn
 PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK; Morgan, Helen Kate Ann; Ward, Robert William; Thompson, Mervyn
 SOURCE: PCT Int. Appl., 66 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9734905	A1	19970925	WO 1997-EP1286	19970312 <--
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.: GB 1996-5495				A 19960315 <--
OTHER SOURCE(S): CASREACT 127:278309; MARPAT 127:278309				
ED Entered STN: 09 Oct 1997				
AB ROXCH ₂ CHOHCH ₂ NHCR ₁ R _{1a} CH ₂ C ₆ H ₃ R ₃ -4-OCH ₂ R ₂ (1) or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable solvate thereof (R ₀ = aryl group optionally substituted with 1-3 hydroxy, hydroxymethyl, nitro, amino, alkylamino, dialkylamino, alkylsulfonamido groups wherein the alkyl group is optionally substituted with 1-3 halogen, haloalkyl, hydroxy, alkoxy, or arylsulfonamido wherein the aryl group is optionally substituted, providing that R ₀ is not 3-methylsulfonylaminophenyl when X = O or S; R ₁ , R _{1a} = H, alkyl; R ₂ = P(O)R ₄ R ₅ (R ₄ , R ₅ = H, alkyl, cycloalkyl, aryl or aralkyl or R ₄ R ₅ =				

-(CH₂)_n- (n = 3-5)); and R₃ = H, halogen, alkyl or alkoxy); a pharmaceutical composition comprising such a compound, a process for preparing such a compound and the use of such a compound and composition in medicine are claimed. 1 Are prepared from the epoxides R₀'XCH₂CHCH₂O (R₀' = R₀ or a protected form) and T₀NHCR1R1aCH₂C₆H₃R₃'-4-OCH₂R₂' (R₂', R₃' = R₂, R₃ resp. or protected forms thereof; T₀ = H or protecting group) with, optionally, one or more of the following steps: (i) converting 1 to another 1; (ii) removing any protecting groups; (iii) preparing a pharmaceutically acceptable salt of 1 and/or a pharmaceutically acceptable solvate thereof. For example, (S)-4-((4-HOC₆H₄)OCH₂CH(OH)CH₂NHCH₂CH₂)C₆H₄OCH₂P(O)Ph₂ was prepared in 94% yield by Pd/C-catalyzed hydrogenation of the benzyl ether, which in turn was prepared in 33% yield from [4-(2-aminoethyl)phenoxyethyl]diphenyl phosphine oxide and (S)-2-(4-benzyloxyphenoxyethyl)oxirane in MeOH. The title compds. are claimed to be useful for treating hyperglycemia, Type II diabetes, obesity, gastrointestinal disorders, intestinal ulcerations, gastrointestinal ulcerations, hyperinsulinemia and depression and for increasing the high-d.-lipoprotein (HDL) cholesterol concentration and decreasing the triglyceride concentration in blood serum.

IC ICM C07F009-53

ICS A61K031-66; C07F009-6568

CC 29-7 (Organometallic and Organometalloidal Compounds)

Section cross-reference(s): 1, 63

ST aminoalkylphenoxyethylphosphine oxide aryloxypropanol arylthiopropanol prepn; aryloxypropanol aminoalkylphenoxyethylphosphine oxide prepn adrenoreceptor agonist; arylthiopropanol aminoalkylphenoxyethylphosphine oxide prepn adrenoreceptor agonist; beta adrenoreceptor agonist phosphine oxide prepn; hyperglycemia drug phosphine oxide prepn; diabetes drug phosphine oxide prepn; obesity drug phosphine oxide prepn; gastrointestinal disorder drug phosphine oxide prepn; ulceration drug phosphine oxide prepn; intestinal ulceration drug phosphine oxide prepn; hyperinsulinemia drug phosphine oxide prepn; antidepressant phosphine oxide prepn; HDL cholesterol enhancer phosphine oxide prepn; blood triglyceride depressant phosphine oxide prepn

IT Antidepressants

Antidiabetic agentsAntiobesity agents

Antiulcer agents

(preparation of phosphorus containing aryloxy and arylthiopropanol amine derivs.

useful as)

IT 9004-10-8, Insulin, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (hyperinsulinemia; preparation of phosphorus containing aryloxy and arylthiopropanol amine derivs. useful for treating)

IT 51-67-2, Tyramine 85-46-1, 1-Naphthylsulfonyl chloride 98-09-9, Benzenesulfonyl chloride 98-60-2, 4-Chlorobenzenesulfonyl chloride 100-39-0, Benzyl bromide 103-16-2, 4-Benzylxyphenol 124-63-0, Methanesulfonyl chloride 358-23-6, Trifluoromethanesulfonic anhydride 403-42-9 637-59-2, 1-Bromo-3-phenylpropane 676-58-4, Methylmagnesium chloride 762-04-9, Diethyl phosphite 824-94-2, 4-Methoxybenzyl chloride 4559-70-0, Diphenylphosphine oxide 6322-56-1, 4-Hydroxy-3-nitroacetophenone 10147-37-2, 2-Propanesulfonyl chloride 17696-62-7, 4-Hydroxyphenyl benzoate 24424-99-5, Di-tert-butyl dicarbonate 50505-66-3 51706-55-9, 4-(2-Amino-2,2-dimethylethyl)phenol 115314-14-2, (S)-Glycidyl-3-nitrobenzenesulfonate 177704-06-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of phosphorus containing aryloxy and arylthiopropanol amine
 derivs.

useful as beta adrenoreceptor agonists)

IT 9004-10-8, Insulin, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (hyperinsulinemia; preparation of phosphorus containing aryloxy and
 arylthiopropanol amine derivs. useful for treating)

RN 9004-10-8 HCPLUS

CN Insulin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

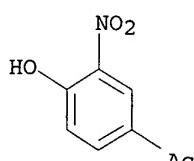
IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of phosphorus containing aryloxy and arylthiopropanol amine
 derivs.

useful as beta adrenoreceptor agonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 15 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:365468 HCPLUS

DOCUMENT NUMBER: 125:58092

TITLE: Preparation of aryloxy- and arylthiopropanolamine
 derivatives as β3-adrenoreceptor agonists and
 β1- and β2-adrenoreceptor antagonists

INVENTOR(S): Beeley, Lee James; Thompson, Mervyn; Dean, David
 Kenneth; Kotecha, Nikesh Rasiklal; Berge, John
 Michael; Ward, Robert William

PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK

SOURCE: PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9604233	A1	19960215	WO 1995-EP3037	19950727 <--
W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			

CA 2196193	AA	19960215	CA 1995-2196193	19950727 <--
AU 9532546	A1	19960304	AU 1995-32546	19950727 <--
EP 772585	A1	19970514	EP 1995-929029	19950727 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1159797	A	19970917	CN 1995-195371	19950727 <--
BR 9508991	A	19971021	BR 1995-8991	19950727 <--
HU 76800	A2	19971128	HU 1997-262	19950727 <--
JP 10503507	T2	19980331	JP 1995-506193	19950727 <--
NO 9700372	A	19970318	NO 1997-372	19970128 <--
GB 1994-15304 A 19940729 <--				
GB 1994-23179 A 19941117 <--				
GB 1995-10485 A 19950524 <--				
WO 1995-EP3037 W 19950727 <--				

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): CASREACT 125:58092; MARPAT 125:58092

ED Entered STN: 25 Jun 1996

AB The title compds. [I; R0 = (substituted) aryl; X = O, S; R1, R1a = H, alkyl; R2 = OCH₂CO₂H, ester or amide thereof, OCH₂PO(OR₄)R₅ (wherein R₄ = H, alkyl, hydroxyalkyl, etc. and R₅ = OH, alkoxy, arylalkyloxy, etc.); R₃ = H, halo, alkyl, alkoxy; R₃R₂ = OC(CO₂H)₂O] , useful in treatment of hyperglycemia, obesity, atherosclerosis, hyperinsulinemia, gastrointestinal disorders in humans and non-humans and as veterinary agents decreasing birth mortality rate in livestock, were prepared Refluxing of (S)-oxirane II with (R)-phosphonate III in MeOH followed by deprotection of the intermediate IV with HF.pyridine complex and reaction of di-Et ester V with LiOH/1,4-dioxane afforded (S,R)-I [R0 = 3,4-(HOCH₂)(HO)C₆H₃; X = O; R1= H; R1a = Me; R2 = OCH₂PO(OEt)OLi; R3 = H]. Compound (S,R)-I [R0 = 3,4-(HOCH₂)(HO)C₆H₃; X = O; R1= H; R1a = Me; R2 = OCH₂PO(OLi)O(CH₂)₃OCH₂Ph; R3 = H] showed IC₅₀ of 1.1 μM against the human β₃-adrenoreceptor and Ki of 21 and 10 μM against human β₁- and β₂-adrenoreceptors, resp.

IC ICM C07C217-60

ICS C07C235-20; C07F009-38; A61K031-165; A61K031-215; A61K031-19; A61K031-66; A61K031-36; C07D317-58

CC 25-10 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1, 17, 18

ST adrenergic agonist antagonist aryloxypropanolamine arylthiopropanolamine prepns; hyperglycemia aryloxypropanolamine arylthiopropanolamine prepns; obesity aryloxypropanolamine arylthiopropanolamine prepns; antiatherosclerotic aryloxypropanolamine arylthiopropanolamine prepns; gastrointestinal disorder aryloxypropanolamine arylthiopropanolamine prepns; animal nutrition growth aryloxypropanolamine arylthiopropanolamine prepns; hyperinsulinemia aryloxypropanolamine arylthiopropanolamine prepns

IT Animal growth

Animal nutrition

Antidiabetics and HypoglycemicsAntiobesity agents(preparation of aryloxy- and arylthiopropanolamine derivs. as β₃-adrenoreceptor agonists and β₁- and β₂-adrenoreceptor antagonists)

IT 51-67-2, Tyramine 60-12-8, 2-Phenylethanol 71-36-3, 1-Butanol, reactions 96-32-2, Methyl bromoacetate 98-60-2, 4-Chlorobenzenesulfonyl chloride 100-39-0, Benzyl bromide 100-44-7, Benzyl chloride, reactions 103-16-2, 4-Benzylxylophenol 108-93-0, Cyclohexanol, reactions 300-57-2, Allylbenzene 592-41-6, 1-Hexene, reactions 631-22-1, Diethyl dibromomalonate 1745-81-9, O-Allylphenol 1883-32-5, 2,2-Diphenylethanol 2310-71-6, Cyclohexylphosphinic acid 2511-09-3 2656-14-6 3769-41-3, 3-Benzylxylophenol 6272-38-4,

2-Benzylxylophenol **6322-56-1** 14593-43-2, Allyl benzyl ether
 16475-90-4, Methyl 5-acetylsalicylate 24424-99-5, Di-tert-butyl
 dicarbonate 27628-06-4 50505-66-3 61227-22-3 64318-28-1
 81227-99-8 85272-31-7, Di-tert-butylsilyl bis(trifluoromethanesulfonate)
 102198-71-0 115314-14-2, (S)-Glycidyl-3-nitrobenzenesulfonate
 115314-17-5 155050-97-8 159182-09-9 172967-69-0 177704-15-3
 177782-30-8

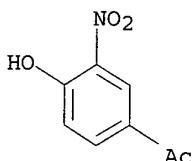
RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of aryloxy- and arylthiopropanolamine derivs. as
 β_3 -adrenoreceptor agonists and β_1 - and β_2 -adrenoreceptor
 antagonists)

IT **6322-56-1**

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of aryloxy- and arylthiopropanolamine derivs. as
 β_3 -adrenoreceptor agonists and β_1 - and β_2 -adrenoreceptor
 antagonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 16 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:200127 HCPLUS

DOCUMENT NUMBER: 124:260843

TITLE: Preparation of 4-benzoylamino-3,4-dihydro-2H-benzopyran-3-ol derivatives and analogs as therapeutic agents

INVENTOR(S): Vong, Antonio Kuok Keong; Thompson, Mervyn; Evans, John Morris; Morgan, Helen Kate Anne

PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK

SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9534547	A1	19951221	WO 1995-EP2249	19950609 <--
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 764159	A1	19970326	EP 1995-923297	19950609 <--
EP 764159	B1	20000809		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 10501256	T2	19980203	JP 1996-501606	19950609 <--
US 5843989	A	19981201	US 1996-750614	19961210 <--
PRIORITY APPLN. INFO.:			GB 1994-11636	A 19940610 <--
			GB 1994-11797	A 19940613 <--

WO 1995-EP2249

W 19950609 <--

OTHER SOURCE(S): MARPAT 124:260843

ED Entered STN: 09 Apr 1996

AB Certain 5- and/or 8-substituted benzopyran, pyranopyridine or tetrahydroquinoline compds. having a C-4 amide substituent [I; Y = N and R2 = H or Y = CR1; either one of R1 and R2 = H and the other = H, cycloalkyl, (un)substituted alkyl optionally interrupted by O, alkylcarbonyl, alkoxy carbonyl, alkylcarbonyloxy, alkoxy, NO₂, cyano, halo, CF₃, CF₃S, etc.; either Z = N only when Y = CR1 or Z = CRa when Y = N or CR1; wherein Ra = H, halo, NO₂, alkylcarbonyl, alkyl, arylalkyl, arylalkenyl, heteroarylalkyl, heteroarylalkenyl; Rb = H, halo, NO₂; or Rb = alkylcarbonyl or alkyl with the proviso that Ra = Rb ≠ H except in the case where one of R1 and R2 = NO₂, cyano, or alkylcarbonyl and the other = halo or alkyl; one of R3 and R4 = H or alkyl or the other = alkyl, CF₃, CH₂Xa; wherein Xa = F, Cl, Br, iodo, alkoxy, HO, alkylcarbonyloxy, etc.; R5 = alkylcarbonyloxy, BzO, ONO₂, OCH₂Ph, or alkoxy, and R6 = R9 = H; or R5 = HO and R6 and R9 = H or alkyl; R7 = (un)substituted heteroaryl, Ph, aryloxy, heteroaryloxy, alkoxy, alkyl, aminosulfonyl, or CONH₂, substituted amino; R8 = H, alkyl, (un)substituted OH, acylamino; X = O, NH, alkylimino; the group R8-NCO-R7 group is cis or trans to the R5 group] are prepared. These compds. are useful for the treatment and/or prophylaxis of anxiety, mania, depression, disorders associated with a subarachnoid hemorrhage or neural shock, the effects associated with withdrawal from substances of abuse such as cocaine, nicotine, alc., and benzodiazepines, disorders treatable and/preventable with anticonvulsive agents such as epilepsy, Parkinson's disease, psychosis, migraine, cerebral ischemia, Alzheimer's disease, schizophrenia, obsessive compulsive disorder, panic disorders and/or aggression (no data). Thus, alkylation of 4-hydroxy-3-iodoacetophenone by 3-chloro-3-methylbut-1-yne in a mixture of 40% aqueous NaOH, H₂O, and xylene at 90° for 3 h to the propargyl ether followed by cyclization in refluxing xylene gave 6-acetyl-8-ido-2,2-dimethyl-2H-1-benzopyran, which was treated with NBS in aqueous DMSO for 2 h to give a crude bromohydrin (II; X₁ = Br, X₂ = OH) and underwent ammonolysis in 2 M NH₃ in MeOH at 100° for 16 h to give the trans-4-amino-3-hydroxy-3,4-dihydrobenzopyran derivative II (X₁ = OH, X₂ = NH₂). The latter amine was condensed with 3-azidobenzoic acid using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride and 1-hydroxybenzotriazole in DMF to give the title compound II (X₁ = OH, X₂ = Q).

IC ICM C07D311-68

ICS C07D491-04; A61K031-35

CC 27-14 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1

ST benzoylaminodihydrobenzopyranol prep therapeutic; subarachnoid hemorrhage treatment benzoylaminodihydrobenzopyranol; neural shock treatment benzoylaminodihydrobenzopyranol; anticonvulsive agent benzoylaminodihydrobenzopyranol; epilepsy treatment benzoylaminodihydrobenzopyranol; Parkinson disease treatment benzoylaminodihydrobenzopyranol; psychosis treatment benzoylaminodihydrobenzopyranol; migraine treatment benzoylaminodihydrobenzopyranol; cerebral ischemia treatment benzoylaminodihydrobenzopyranol; Alzheimer disease treatment benzoylaminodihydrobenzopyranol; schizophrenia treatment benzoylaminodihydrobenzopyranol; obsessive compulsive disorder treatment benzoylaminodihydrobenzopyranol; panic treatment benzoylaminodihydrobenzopyranol; aggression treatment benzoylaminodihydrobenzopyranol; anxiety treatment

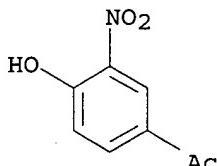
benzoylaminodihydrobenzopyranol; mania treatment
 benzoylaminodihydrobenzopyranol; depression treatment
 benzoylaminodihydrobenzopyranol; substance abuse withdrawal shock
 IT Anticonvulsants and Antiepileptics
 Antidepressants
 Anxiolytics
 Epilepsy
 Parkinsonism
 Schizophrenia
 Shock
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Drug dependence
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents for treating withdrawal from substance abuse)
 IT Mental disorder
 (Alzheimer's disease, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Behavior
 (aggressive, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Brain, disease
 (ischemia, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Mental disorder
 (mania, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Headache
 (migraine, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Mental disorder
 (obsession-compulsion, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Anxiety
 (panic, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT Mental disorder
 (psychosis, preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT 174894-44-1P 174894-45-2P 174894-46-3P 174894-47-4P 174894-48-5P
 174894-49-6P 174894-50-9P 174894-51-0P 174894-52-1P 174894-53-2P
 174894-54-3P 174894-55-4P 174894-56-5P 174894-57-6P 174894-58-7P
 174894-59-8P 174894-60-1P 174894-61-2P 174894-62-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as therapeutic agents)
 IT 100-42-5, Styrene, reactions 118-91-2, 2-Chlorobenzoic acid 118-93-4
 121-71-1 124-38-9, Carbon dioxide, reactions 127-19-5,
 N,N-Dimethylacetamide 403-16-7, 3-Chloro-4-fluorobenzoic acid
 403-43-0, 4-Fluorobenzoyl chloride 456-22-4, 4-Fluorobenzoic acid
 618-46-2, 3-Chlorobenzoyl chloride 626-18-6, 1,3-
 Bis(hydroxymethyl)benzene 824-75-9, 4-Fluorobenzamide 1078-19-9,
 6-Methoxy-1-tetralone 1111-97-3, 3-Chloro-3-methylbut-1-yne 1843-35-2,
 3-Azidobenzoic acid 3970-21-6, 2-Methoxyethoxymethyl chloride

6322-56-1, 4-Hydroxy-3-nitroacetophenone 15852-73-0,
 3-Bromobenzyl alcohol 62615-24-1, 4-Hydroxy-3-iodoacetophenone
 105220-81-3, Tributyltinmethanol 174894-80-5 174894-81-6 174894-82-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as
therapeutic agents)

IT 3470-50-6P, 6-Hydroxy-1-tetralone 89316-98-3P 93914-53-5P,
 3-Acetyloxymethylbenzyl alcohol 95068-01-2P, 3-Bromobenzyl ethyl ether
 107318-16-1P, 5-Bromo-6-hydroxy-1-tetralone 162335-01-5P 162335-05-9P
 174894-63-4P 174894-64-5P 174894-65-6P 174894-66-7P 174894-67-8P
 174894-68-9P 174894-69-0P 174894-70-3P 174894-71-4P 174894-72-5P
 174894-73-6P 174894-74-7P 174894-75-8P 174894-76-9P 174894-77-0P
 174894-78-1P 174894-79-2P 174894-83-8P, 6-[(2-Methoxyethoxy)methoxy]-1-
 tetralone 174894-84-9P, 5-Bromo-6-[(2-methoxyethoxy)methoxy]-1-tetralone
 174894-85-0P, 3-Ethoxymethylbenzoic acid 174894-86-1P,
 3-Acetyloxymethylbenzoic acid
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as
therapeutic agents)

IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of benzoylaminodihydrobenzopyranol derivs. and analogs as
therapeutic agents)

RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 17 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:938107 HCPLUS
 DOCUMENT NUMBER: 124:8408
 TITLE: Preparation of hydroxyaminoethylphenylsulfonamide
 catecholamine surrogates useful as β3 adrenergic
 agonists.
 INVENTOR(S): Washburn, William N.; Girotra, Ravindar N.; Sher,
 Philip M.; Mikkilineni, Amarendra B.; Poss, Kathleen
 M.; Mathur, Arvind; Gayai, Ashvinikumar; Bisacchi,
 Gregory S.
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA
 SOURCE: Eur. Pat. Appl., 147 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 659737	A2	19950628	EP 1994-120281	19941221 <-- ,
EP 659737	A3	19970305		
EP 659737	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
TW 424082	B	20010301	TW 1994-83111890	19941219 <--
HU 72302	A2	19960429	HU 1994-3694	19941220 <--
HU 220063	B	20011028		
CA 2138675	AA	19950622	CA 1994-2138675	19941221 <--
FI 9406003	A	19950622	FI 1994-6003	19941221 <--
NO 9404969	A	19950622	NO 1994-4969	19941221 <--
AU 9481635	A1	19950629	AU 1994-81635	19941221 <--
AU 688417	B2	19980312		
JP 07206806	A2	19950808	JP 1994-336251	19941221 <--
CN 1109050	A	19950927	CN 1994-113297	19941221 <--
ZA 9410213	A	19960621	ZA 1994-10213	19941221 <--
AT 235463	E	20030415	AT 1994-120281	19941221 <--
ES 2194857	T3	20031201	ES 1994-120281	19941221 <--
PRIORITY APPLN. INFO.:			US 1993-171285	A 19931221 <--

OTHER SOURCE(S): CASREACT 124:8408; MARPAT 124:8408

ED Entered STN: 23 Nov 1995

AB Title compds. [I; A = bond, $(CH_2)_n$, CHB; n = 1-3; B = cyano, CONR9R91, CO2R7; R1 = alkyl, aryl, aralkyl; R2 = H, OH, alkoxy, CH2OH, cyano, CO2R7, CO2H, CONH2, tetrazolyl, CH2NH2, halo; R3 = H, alkyl, heterocyclyl, (substituted) Ph; R4 = H, alkyl, B; R5, R51 = H, alkoxy, alkyl, halo, OH, cyano, $(CH_2)_nNR_6COR_7$, CONR6R61, CONR6OR6, CO2R6, SR7, SOR7, SO2R7, NR6SO2R1, NR6R61, NR6COR7, OCH2CONR6R61, OCH2CO2R7, aryl; R5R51 = atoms to form aryl, heterocyclyl; R6, R61 = H, alkyl; R7 = alkyl; R9, R91 = H, alkyl, cycloalkyl, aralkyl, aryl, heteroaryl; R9R91N = heterocyclyl; with the proviso that when A = bond or $(CH_2)_n$ and R3 = H or unsubstituted alkyl, then R4 = B or substituted alkyl], were prepared for treating diabetes, obesity, intestinal hypermotility, etc. (no data). Thus, 3,4-dimethoxybenzaldehyde in THF was treated with PhCH2MgCl in THF followed by 20 min reflux to give 90% α -(3,4-dimethoxyphenyl)benzeneethanol; Jones oxidation gave 89% 1-(3,4-dimethoxyphenyl)-2-phenylethanone. The latter was heated at 160° with NH4O2CH to give N-[1-(3,4-dimethoxyphenyl)-2-phenylethyl]formamide, which was treated with HCl in MeOH to give 77% α -(3,4-dimethoxyphenyl)benzeneethanamine hydrochloride. This was converted to the free base, which in MeCN was treated with 2-bromo-1-[4-phenylmethoxy-3-methylsulfonylamino]phenylethanone (preparation given) and then NaBH4 in EtOH to give title compound (II), isolated

as the trifluoroacetate salt.

IC ICM C07C311-21

ICS C07C311-08; C07C311-10; A61K031-18

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 1

ST catecholamine surrogate prepn adrenergic agonist; hydroxyaminoethylphenylsulfonamide prepn adrenergic agonist; gastric hypermotility treatment hydroxyaminoethylphenylsulfonamide; gastrointestinal disease treatment hydroxyaminoethylphenylsulfonamide; diabetes treatment hydroxyaminoethylphenylsulfonamide; obesity treatment hydroxyaminoethylphenylsulfonamide

IT Antidiabetics and Hypoglycemics

Antiobesity agents

(preparation of catecholamine surrogates useful as β_3 adrenergic

agonists)

IT Digestive tract

(disease, treatment; preparation of catecholamine surrogates useful as β_3 adrenergic agonists)

IT	120-44-5P	459-04-1P	2003-14-7P	2065-04-5P	2417-42-7P	2729-19-3P
	3141-93-3P	3864-15-1P	4693-91-8P	4837-20-1P, 4-		
	Difluoromethoxybenzoic acid	6275-09-8P	6322-56-1P	7306-46-9P		
	7377-26-6P	7479-11-0P	10133-22-9P	10133-30-9P, 5-		
	Formylbenzo [b] thiophene	10313-60-7P	14347-14-9P	14347-15-0P		
	14347-18-3P	14347-24-1P	14347-25-2P	17554-34-6P	20532-34-7P,	
	Benzo [b] thiophene-5-methanol	22955-07-3P	24845-40-7P	26218-80-4P		
	29955-23-5P	31352-40-6P	39098-97-0P, 2-Thiopheneacetyl chloride			
	42988-86-3P	50685-26-2P	55095-27-7P	57320-63-5P	58584-63-7P	
	58819-72-0P	59576-23-7P	62596-18-3P	63720-40-1P	65614-75-7P	
	65873-72-5P	79406-59-0P	80235-73-0P	80235-75-2P	80589-49-7P	
	89876-14-2P	90021-26-4P	92907-92-1P	94843-38-6P	98466-44-5P	
	101499-01-8P	126748-44-5P	143886-45-7P	160059-10-9P	169273-94-3P	
	170686-40-5P	170687-68-0P	170687-69-1P	170687-70-4P	170687-71-5P	
	170687-72-6P	170687-73-7P	170687-74-8P	170687-75-9P	170687-76-0P	
	170687-77-1P	170687-78-2P	170687-79-3P	170687-80-6P	170687-81-7P	
	170687-82-8P	170687-83-9P	170687-84-0P	170687-85-1P	170687-86-2P	
	170687-87-3P	170687-88-4P	170687-89-5P	170687-90-8P	170687-91-9P	
	170687-92-0P	170687-93-1P	170687-94-2P	170687-95-3P	170687-96-4P	
	170687-97-5P	170687-98-6P	170687-99-7P	170688-00-3P	170688-01-4P	
	170688-02-5P	170688-03-6P	170688-04-7P	170688-05-8P	170688-06-9P	
	170688-07-0P	170688-08-1P	170688-09-2P	170688-10-5P	170688-11-6P	
	170688-12-7P	170688-13-8P	170688-14-9P	170688-15-0P	170688-16-1P	
	170688-17-2P	170688-18-3P	170688-19-4P	170688-20-7P	170688-21-8P	
	170688-22-9P	170688-23-0P	170688-24-1P	170688-25-2P	170688-26-3P	
	170688-27-4P	170688-28-5P	170688-29-6P	170688-30-9P	170688-31-0P	
	170688-32-1P	170688-33-2P	170688-34-3P	170688-35-4P	170688-36-5P	
	170688-37-6P	170688-38-7P	170688-39-8P	170688-40-1P	170688-41-2P	
	170688-42-3P	170688-43-4P	170688-44-5P	170688-45-6P	170688-46-7P	
	170688-47-8P	170688-48-9P	170688-49-0P	170688-50-3P	170688-51-4P	
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	170688-57-0P	170688-58-1P	170688-59-2P	170688-60-5P	170688-61-6P	
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	170688-67-2P	170688-68-3P	170688-69-4P	170688-70-7P	170688-71-8P	
	170688-72-9P	170688-73-0P	170688-74-1P	170688-75-2P	170688-76-3P	
	170688-77-4P	170688-78-5P	170688-79-6P	170688-80-9P	170688-81-0P	
	170688-82-1P	170688-83-2P	170688-84-3P	170688-85-4P	170688-86-5P	
	170688-87-6P	170688-88-7P	170688-89-8P	170688-90-1P	170688-91-2P	
	170688-92-3P	170688-93-4P	170688-94-5P	170688-95-6P	170688-96-7P	
	170688-97-8P	170688-98-9P	170688-99-0P	170689-00-6P	170689-01-7P	
	170689-04-0P	170689-05-1P	170689-07-3P	170689-08-4P	170689-09-5P	
	170689-10-8P	170689-11-9P	170689-12-0P	170689-13-1P	170689-16-4P	
	170900-62-6P	170900-63-7P	170900-64-8P	170900-66-0P	170900-67-1P	
	171044-68-1P	179930-11-1P				

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

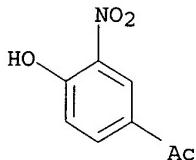
(preparation of catecholamine surrogates useful as β_3 adrenergic agonists)

IT **6322-56-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of catecholamine surrogates useful as β_3 adrenergic agonists)

RN 6322-56-1 HCAPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 18 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1994:533706 HCAPLUS
 DOCUMENT NUMBER: 121:133706
 TITLE: 4-(4-hydroxy-3-nitrophenyl)-4-oxo-(2E)-butenoic acid-
 and 4-(4-hydroxy-3-nitrophenyl)-4-oxo-(2Z)-butenoic
 acid-derivative H₂ receptor antagonists and
 photochemical methods for their preparation
 INVENTOR(S): Szoke, Katalin; Fischer, Janos; Ezer, Elemer; Matuz,
 Judit; Saghy, Katalin; Szporny, Laszlo; Hajos, Gyorgy
 PATENT ASSIGNEE(S): Richter, Gedeon, Vegyeszeti Gyar Rt., Hung.
 SOURCE: PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9414751	A1	19940707	WO 1993-HU75	19931217 <--
W: BY, CA, CZ, FI, JP, KR, KZ, LK, NO, PL, RO, RU, SK, UA, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
HU 210698	B	19950828	HU 1992-4116	19921223 <--
PRIORITY APPLN. INFO.:			HU 1992-4116	A 19921223 <--

OTHER SOURCE(S): CASREACT 121:133706

ED Entered STN: 17 Sep 1994

AB Therapeutically active 4-(4-hydroxy-3-nitrophenyl)-4-oxo-(2E)-butenoic acid and 4-(4-hydroxy-3-nitrophenyl)-4-oxo-(2Z)-butenoic acids, I, as well as their salts formed with H₂ receptor antagonists (preferably the Famotidine salt), are prepared and pharmaceutical formulations containing I are presented. The (2Z)-I isomer is prepared by the photochem. isomerization of (2E)-I. I and their salts possess significant gastric acid secretion inhibitory and gastro-cytoprotective activities (no data).

IC ICM C07C205-56
ICS A61K031-19

CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 63, 74

IT **6322-56-1P**, 4-Hydroxy-3-nitroacetophenone
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of
 hydroxynitrophenyloxobutenoic
 acid H₂ receptor antagonists)

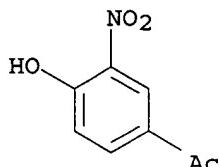
IT **6322-56-1P**, 4-Hydroxy-3-nitroacetophenone

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of hydroxynitrophenyloxobutenoic acid H₂ receptor antagonists)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 19 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:277045 HCPLUS

DOCUMENT NUMBER: 122:46487

TITLE: CAT-1 inhibitors, their synthesis, pharmaceutical compositions, and methods of use

INVENTOR(S): Guthrie, Robert W.; Mullin, John G., Jr.; Kachensky, David F.; Kierstead, Richard W.; Tilley, Jefferson W.; Heathers, Guy P.; Higgins, Alan J.; Lemahieu, Ronald A.

PATENT ASSIGNEE(S): Hoffman-La Roche Inc., USA

SOURCE: U.S., 85 pp. Cont.-in-part of U.S. Ser. No. 698, 014, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5344843	A	19940906	US 1992-850620	19920313 <--
RU 2059603	C1	19960510	RU 1992-5011784	19920131 <--
EP 512352	A2	19921111	EP 1992-107135	19920427 <--
EP 512352	A3	19930310		
EP 512352	B1	19960327		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
AT 136018	E	19960415	AT 1992-107135	19920427 <--
AU 9216003	A1	19921112	AU 1992-16003	19920504 <--
AU 653398	B2	19940929		
CA 2068076	AA	19921110	CA 1992-2068076	19920506 <--
ZA 9203279	A	19930127	ZA 1992-3279	19920506 <--
NO 9201840	A	19921110	NO 1992-1840	19920508 <--
HU 63602	A2	19930928	HU 1992-1538	19920508 <--
JP 05279353	A2	19931026	JP 1992-143375	19920508 <--
JP 07107060	B4	19951115		
RO 109938	B1	19950728	RO 1992-622	19920508 <--
BR 9201769	A	19921229	BR 1992-1769	19920511 <--
PRIORITY APPLN. INFO.:			US 1991-698014	B2 19910509 <--

US 1992-850620

A 19920313 <--

OTHER SOURCE(S): MARPAT 122:46487

ED Entered STN: 07 Jan 1995

AB The invention relates to compds. I (R1 = OH; R2, R3 = H, alkyl, aryl, alkoxy, etc.; X, Y together = O, or one is amino and other is H; Z = S, CR₂=CR_{2'}; A = bond, O, S, SO, CHCH, etc.; B = bond, O, S, SO, etc.; Q = Ph, cyclohexyl, pyridinyl, etc.; n = 1-6) and their pharmaceutically acceptable salts, and when appropriate, enantiomers, racemates, diastereomers or mixts. thereof or geometric isomer or mixts. thereof, and pharmaceutically acceptable salts thereof. The compds. inhibit carnitine acyltransferase 1 (CAT-1) and are therefore useful in the prevention of injury to ischemic tissue, and can limit infarct size, improve cardiac function and prevent arrhythmias during and following a myocardial infarction. 5-[2-(2-naphthoxyethoxy)-α-oxo-2-thiopheneacetic acid (preparation given) inhibited CAT-1 with an IC₅₀ = 0.05 μM. Tablet and capsule formulations containing 4-[2-(2-naphthoxyethoxy)-α-oxobenzeneacetic acid are presented.

IC ICM A61K031-19

ICS A61K031-38; C07C065-40; C07D333-32

INCL 514473000

CC 1-8 (Pharmacology)

Section cross-reference(s): 7, 25, 27, 63

IT Ischemia

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds. for prevention of injury from)IT Pharmaceutical dosage forms(capsules, synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT Heart, disease

(infarction, synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds. for prevention of injury from)IT Pharmaceutical dosage forms(tablets, synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 39386-49-7, Carnitine acyltransferase

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitor compds.; synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 145794-10-1P 145795-19-3P 145795-25-1P 145795-27-3P 145795-76-2P

145795-81-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 145794-12-3P 145794-14-5P 145794-16-7P 145794-21-4P 145794-23-6P

145794-25-8P 145794-27-0P 145794-29-2P 145794-31-6P 145794-33-8P

145794-35-0P 145794-37-2P 145794-39-4P 145794-41-8P 145794-43-0P

145794-45-2P 145794-47-4P 145794-49-6P 145794-51-0P 145794-53-2P

145794-55-4P 145794-57-6P 145794-59-8P 145794-61-2P 145794-63-4P

145794-65-6P 145794-67-8P 145794-69-0P 145794-71-4P 145794-73-6P

145794-75-8P 145794-77-0P 145794-79-2P 145794-82-7P 145794-86-1P

145794-90-7P	145794-92-9P	145794-94-1P	145794-98-5P	145794-99-6P
145795-01-3P	145795-02-4P	145795-04-6P	145795-05-7P	145795-06-8P
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145795-73-9P	145795-74-0P	145795-75-1P	145795-77-3P	145795-79-5P
145795-82-0P	145795-83-1P	145795-84-2P	145795-85-3P	145795-86-4P
145795-87-5P	145795-88-6P	145795-89-7P	145795-90-0P	145795-91-1P
145795-92-2P	145796-00-5P	145796-01-6P	145796-02-7P	145796-03-8P
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160062-26-0P				

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 145794-09-8 145795-95-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 56-81-5, 1,2,3-Propanetriol, reactions 57-14-7, 1,1-Dimethylhydrazine
 79-37-8, Oxalyl chloride 91-21-4, 1,2,3,4-Tetrahydroisoquinoline
 92-44-4, 2,3-Dihydroxynaphthalene 93-20-9 100-39-0, Benzyl bromide
 108-00-9, N,N-Dimethylethylenediamine 108-01-0 111-42-2,
 Diethanolamine, reactions 112-27-6 124-40-3, Dimethylamine, reactions
 141-43-5, reactions 403-14-5, 3-Fluoro-4-hydroxyacetophenone 460-00-4,
 4-Fluorobromobenzene 588-63-6, (3-Bromopropoxy)benzene 589-10-6,
 β -Bromophenetole 593-56-6, Methoxylamine hydrochloride 613-54-7,
 Bromomethyl 2-naphthyl ketone 637-59-2, 3-Bromo-1-phenylpropane
 769-39-1, 2,3,5,6-Tetrafluorophenol 875-59-2, 4-Hydroxy-2-
 methylacetophenone 876-02-8, 4-Hydroxy-3-methylacetophenone 937-14-4,
 3-Chloroperbenzoic acid 939-26-4, 2-Bromomethylnaphthalene 1137-41-3,
 p-Aminobenzophenone 1200-03-9, (4-Bromobutoxy)benzene 1940-28-9,
 4-Bromo-3,5-dichlorophenol 2243-83-6, 2-Naphthoyl chloride 2450-71-7,
 Propargylamine 2478-38-8, 3,5-Dimethoxy-4-hydroxyacetophenone
 2605-67-6, (Carbomethoxymethylene)triphenylphosphorane 2687-12-9,
 (3-Chloro-1-propenyl)benzene 2687-43-6 2892-29-7, 3-Chloro-4-
 hydroxyacetophenone 2967-54-6, 3,5-Difluoro-4-hydroxybenzonitrile
 3245-62-3 3332-29-4 3747-74-8, 2-Chloromethylquinoline hydrochloride
 3814-20-8 4229-44-1, N-Methylhydroxylamine hydrochloride 4442-79-9,
 Cyclohexaneethanol 4755-77-5, Ethyl oxalyl chloride 5264-15-3,
 4-Pyridinebutanol 5452-37-9, Cyclooctylamine 5470-11-1, Hydroxylamine
 hydrochloride 5856-77-9, 2,2-Dimethylbutyryl chloride 6089-04-9
 6315-52-2 6322-56-1, 4-Hydroxy-3-nitroacetophenone 6707-01-3,

Chloromethoxybenzene 7664-41-7, Ammonia, reactions 13246-14-5
 16427-44-4 16839-97-7 17044-70-1, 3,5-Dichloro-4-hydroxyacetophenone
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 38078-09-0, Diethylaminosulfur trifluoride 38250-16-7 38945-21-0
 39199-93-4 39500-31-7 40299-87-4, 4-(Bromoacetyl)morpholine
 40786-20-7 40926-77-0 41656-75-1 51795-97-2 53542-78-2
 54537-30-3 60753-14-2, 3-Pyridinebutanol 61236-14-4 62001-72-3
 63649-88-7 63649-90-1 63650-21-5 64957-86-4 65512-08-5
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 145798-42-1 145798-43-2 145798-44-3 145798-45-4 145798-46-5
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 145798-63-6 145798-64-7 145798-65-8 160062-29-3 160062-43-1
 160062-44-2D, γ -oxo-2-naphthalenebutanoic acid 160062-46-4
 160062-47-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and pharmaceutical compns. and use of carnitine
acyltransferase inhibitor compds.)

IT	69651-48-5P	89012-04-4P	101125-34-2P	131003-09-3P	134748-95-1P
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	145794-42-9P	145794-44-1P	145794-46-3P	145794-48-5P	145794-50-9P
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145797-61-1P	145797-62-2P	145797-63-3P	145797-65-5P	145797-66-6P
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160062-35-1P	160062-36-2P	160062-37-3P	160062-38-4P	160062-39-5P
160062-40-8P	160062-41-9P	160062-42-0P		

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

IT 145794-20-3P 145795-17-1P 145795-22-8P 145795-35-3P 145795-36-4P
 145795-37-5P 145795-40-0P 145795-54-6P 145795-67-1P 145796-09-4P
 145796-80-1P 145796-85-6P 145798-25-0P 146548-39-2P 160062-30-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

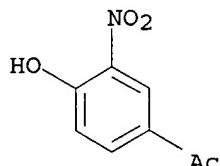
IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and pharmaceutical compns. and use of carnitine acyltransferase inhibitor compds.)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 20 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:426337 HCPLUS

DOCUMENT NUMBER: 117:26337

TITLE: Preparation and formulation of 2-phenylindole derivatives as lipoxygenase inhibitors

INVENTOR(S): Hasegawa, Yukio; Suzuki, Yasushi; Sato, Michitaka; Yamamoto, Norio; Hasumi, Kohichi; Shitara, Kazuhiro; Miyasaka, Katsuhiko; Mikami, Takashi; Miyazawa, Katsuhiko; et al.

PATENT ASSIGNEE(S): Teikoku Hormone Mfg. Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202500	A1	19920220	WO 1991-JP1000	19910725 <--
W: AU, CA, JP, KR, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9182259	A1	19920302	AU 1991-82259	19910725 <--
JP 2988723	B2	19991213	JP 1991-512380 JP 1990-201142 JP 1990-233094	19910725 <-- A 19900731 <-- A 19900905 <--
PRIORITY APPLN. INFO.:			WO 1991-JP1000	A 19910725 <--

OTHER SOURCE(S): MARPAT 117:26337

ED Entered STN: 26 Jul 1992

AB Phenylindole derivs. [I; R₁ = alkyl, alkylthio, PhS; R₂ = H, C₁-3 alkyl; R₃ = H, alkyl; R₄ = alkyl, acyl, R₃R₄N = heterocycle containing optionally addnl. hetero atoms; R₅, R₆ = H, halo, alkyl, alkoxy, acyloxy, etc.], also useful as antiallergic agents, are prepared Nitration of 200 g propiophenone derivative (II; R = H) gave 171 g nitro derivative II (R = NO₂), which (88.8 g) was reduced with Raney Ni in EtOH to give 70.3 amine II (R = NH₂) (III). Methylation of 10.2 g III with MeI and Et₃N in MeOH gave 7.5 g II (R = Me₂N), which as the HCl salt (670 mg) was refluxed with 550 mg p-MeOC₆H₄NHNH₂.HCl in Me₂CHOH to give 680 mg indole salt I.HCl (R₁-R₄ = Me, R₅ = 5-MeO, R₆ = H), which showed IC₅₀ of 1.4 μM against 5-lipoxygenase. Capsule and aerosol formulations were given.

IC ICM C07D209-14

ICS A61K031-40

CC 27-11 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 63

IT 5029-61-8P 6322-56-1P 141771-81-5P 141771-82-6P

141771-83-7P 141771-84-8P 141771-85-9P 141771-86-0P 141771-87-1P

141771-88-2P 141771-89-3P 141771-90-6P 141771-91-7P 141771-92-8P

141771-93-9P 141771-94-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antiallergic agent)

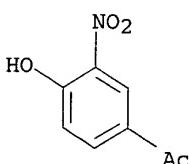
IT 6322-56-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antiallergic agent)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



TITLE: Benzoxazinorifamycins as antibacterial agents and
 their preparation
 INVENTOR(S): Kondo, Hideo; Hashizume, Takushi; Kano, Fumihiko;
 Yamane, Takehiko; Yamashita, Katsuji; Hosoe, Kazunori;
 Watanabe, Kiyoshi
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01207293	A2	19890821	JP 1987-69803	19870324 <--
PRIORITY APPLN. INFO.:			JP 1987-69803	19870324 <--

OTHER SOURCE(S): MARPAT 112:178488

ED Entered STN: 12 May 1990

AB The title compds. I (A = cycloalkylamino; X1 = alkoxy, alkylthio, cyano, etc.; X2 = H, halo), useful as antibacterial agents, were prepared I (X1 = 4'-OMe, X2 = H, A = Q) (prepared from rifamycin S) in vitro exhibited a MIC of 5 µg/mL against Klebsiella pneumoniae.

IC ICM C07D498-18

ICS A61K031-535

ICI C07D498-18, C07D265-00, C07D273-00, C07D307-00

CC 26-9 (Biomolecules and Their Synthetic Analogs)

Section cross-reference(s): 1

IT 394-33-2P, 4-Fluoro-2-nitrophenol 399-97-3P, 2-Amino-4-fluorophenol
 527-62-8P, 2-Amino-4,6-dichlorophenol 3272-08-0P, 4-Cyano-2-nitrophenol
6322-56-1P 7587-04-4P 14543-43-2P, 2-Amino-4-cyanophenol
 20734-76-3P, 2-Amino-4-methoxyphenol 21784-73-6P, 4-Iodo-2-nitrophenol
 31183-81-0P, 2-Amino-4-methylthiophenol 38191-33-2P,
 2-Amino-6-chlorophenol 40140-99-6P 54255-50-4P 99969-17-2P
 118172-45-5P 118172-70-6P 118172-71-7P 125748-92-7P 125748-93-8P
 126277-75-6P 126277-76-7P 126277-77-8P 126277-78-9P 126277-79-0P
 126277-81-4P 126277-85-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antibacterial agent)

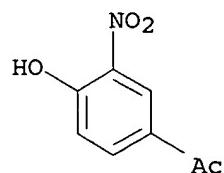
IT 6322-56-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antibacterial agent)

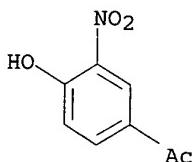
RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 22 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:57408 HCAPLUS
 DOCUMENT NUMBER: 110:57408
 TITLE: Preparation of rifamycin derivatives as antibiotics
 INVENTOR(S): Yamane, Takehiko; Kondo, Hideo; Fuse, Yoshihide;
 Hashizume, Takushi; Kano, Fumihiro; Yamashita,
 Katsuji; Hosoe, Kazunori; Watanabe, Kiyoshi
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 63045282	A2	19880226	JP 1987-78994	19870331 <--	
PRIORITY APPLN. INFO.:			JP 1986-85815	A1 19860414 <--	
OTHER SOURCE(S):	MARPAT	110:57408			
ED	Entered STN:	17 Feb 1989			
AB	The title compds. I [X = O, S; R1 = CHO, C1-4 acyl, (CH ₂) _m Z (wherein m = 1-4, Z = H, cyano, C1-3 alkoxy, C1-4 acyl, etc.), Q, etc.; G = CH ₂ , CO], useful as antibiotics, were prepared. A mixture of rifamycin S and 2-amino-4-trifluoromethylphenol in PhMe was stirred at 60° for 16 h. After evaporation of PhMe, the residue was stirred with MnO ₂ in EtOH at room temperature for 21 h to give I (X = O, R1 = 4'-CF ₃) (II). II in vitro exhibited a MIC of 0.16 µg/mL against Micrococcus luteus IFO 12708.				
IC	ICM	C07D498-18			
CC	ICS	A61K031-535; A61K031-54; C07D513-18			
CC	26-5 (Biomolecules and Their Synthetic Analogs)				
IT	Section cross-reference(s):	<u>1</u>			
IT	<u>6322-56-1P</u>	63367-08-8P	118172-64-8P	118172-65-9P	
		118172-68-2P	118172-70-6P	118172-73-9P	
		118473-03-3P	118473-04-4P	118172-76-2P	
				118172-77-3P	
IT	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)	(preparation and reaction of, in preparation of rifamycin antibiotics)			
IT	<u>6322-56-1P</u>	RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)	(preparation and reaction of, in preparation of rifamycin antibiotics)		
RN	6322-56-1	HCAPLUS			
CN	Ethanone, 1-(4-hydroxy-3-nitrophenyl)-	(9CI)	(CA INDEX NAME)		



L130 ANSWER 23 OF 101 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1981:422778 HCAPLUS

Zhang 10/699,338

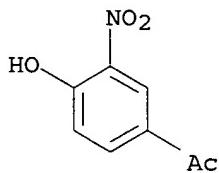
12/06/2006

Zhang 10/699,338

12/06/2006

12/06/2006

DOCUMENT NUMBER: 95:22778
 TITLE: Hapten-specific helper T cells. III. Fine specificity of the (4-hydroxy-3-nitro-phenyl)-acetyl (NP)-specific response in Igh-1b mice
 AUTHOR(S): Martinez-Alonso, Carlos; Coutinho, Antonio; Von Boehmer, Harald; Bernabe, Rosa
 CORPORATE SOURCE: Basel Inst. Immunol., Basel, CH-4005/5, Switz.
 SOURCE: European Journal of Immunology (1981), 11(3), 172-4
 CODEN: EJIMAF; ISSN: 0014-2980
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB Helper cells, with specificity for the haptens (4-hydroxy-3-nitrophenyl)acetyl (NP) or (4-hydroxy-5-iodo-3-nitrophenyl)acetyl (NIP), were raised in B10.BR mice by in vivo priming and in vitro long-term enrichment with hapten-derivatized syngeneic spleen cells. Upon co-culture with the homologous antigen (NP or NIP), selected helper cells specifically responded by proliferation and by inducing large nos. of B cells to clonal expansion and Ig secretion. Criss-cross expts. demonstrated the nonheteroclitic nature of antigen recognition by helper cells, as the proliferative and helper cell activities were in every case one order of magnitude higher when confronted with the homologous hapten used for immunization.
 CC 15-13 (Immunochemistry)
 IT 6322-56-1 76748-71-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (helper cell response to, specificity of)
 IT 6322-56-1
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (helper cell response to, specificity of)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 24 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1979:205543 HCPLUS
 DOCUMENT NUMBER: 90:205543
 TITLE: 2-Amino-4-ethynylphenol
 INVENTOR(S): Evers, Robert C.
 PATENT ASSIGNEE(S): United States Dept. of the Air Force, USA
 SOURCE: U. S. Pat. Appl., 15 pp. Avail. NTIS.
 CODEN: XAXXAV
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1

searched by D. Arnold 571-272-2532

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 925899	A0	19790119	US 1978-925899	19780719 <--
US 4181681	A	19800101		

PRIORITY APPLN. INFO.: US 1978-925899 A 19780719 <--

ED Entered STN: 12 May 1984

AB A 4-step synthesis is described for 2-amino-4-ethynylphenol (I) [70239-82-6], which is used to end-cap fluorocarbon ether oligomers containing terminal imidate groups, to give ethynyl-terminated oligomers vulcanizable to fluorocarbon elastomers. Thus, 4-hydroxy-3-nitroacetophenone [6322-56-1] was acetylated, and the resulting 4-acetoxy-3-nitroacetophenone [60853-74-9] was treated with a Vilsmeier reagent (POCl₃ + DMF) to give 4-acetoxy-3-nitro-β-chlorocinnamaldehyde (II) [70239-80-4]. II was treated with NaOH, and the resulting 4-ethynyl-2-nitrophenol [70239-81-5] was catalytically reduced to give I.

CC 38-2 (Elastomers, Including Natural Rubber)
Section cross-reference(s): 25

L130 ANSWER 25 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:415221 HCPLUS

DOCUMENT NUMBER: 85:15221

TITLE: Studies on plant growth-regulating substances. XLI. Structure-activity relationships and metabolism of a group of nitrophenols capable of inhibiting chloroplast development

AUTHOR(S): Price, D. N.; Wain, R. L.

CORPORATE SOURCE: Wye Coll., Univ. London, Ashford/Kent, UK

SOURCE: Annals of Applied Biology (1976), 83(1), 115-24

CODEN: AABIAV; ISSN: 0003-4746

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

AB Nitrophenols structurally similar to 4-hydroxy-3-nitrobenzoic acid and 4-hydroxy-3-nitrobenzaldehyde were examined for their ability to inhibit chloroplast development in linseed and oat seedlings, and their activity was estimated quant. in specifically designed clover and Lemna bioassays. Twelve compds. were found to be active, and activity was considered in relation to chemical structure. A nitro group in the 3-position and a hydroxyl group or ether linkage in the 4-position were found to be essential for activity whereas the nature of the functional group in the 1-position could vary considerably. Possibilities in which activity might arise from metabolism of the applied compound were investigated using excised wheat and pea tissue, and compds. with various groupings in the 1-position were converted to the corresponding active benzoic acid derivative

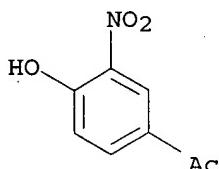
CC 5-3 (Agrochemicals)

IT 88-75-5 89-41-8 96-97-9 97-51-8 99-42-3 99-96-7, biological studies 121-19-7 121-92-6 394-25-2 616-82-0 616-85-3 619-14-7 1019-52-9 1571-72-8 1588-83-6 1620-98-0 3011-34-5 3272-08-0 3604-79-3 5464-98-2 6322-56-1 6635-20-7 10397-58-7 10463-20-4 15174-69-3 19006-46-3 19013-10-6 26879-83-4 31680-08-7 41833-13-0 52132-61-3 54674-91-8 59719-77-6 59719-78-7 59719-79-8 59719-80-1

RL: AGR (Agricultural use); BAC (Biological activity or effector,

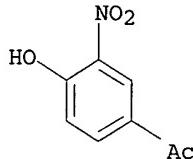
except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(plant growth-regulating activity of)

IT 6322-56-1
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(plant growth-regulating activity of)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)

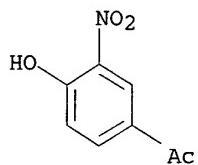


L130 ANSWER 26 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:506605 HCPLUS
 DOCUMENT NUMBER: 73:106605
 TITLE: Antibacterial effect of new benzylideneflavanones and acetophenones
 AUTHOR(S): Gabor, Miklos; Sallai, Janos; Szell, Tamas
 CORPORATE SOURCE: Pharmacodyn. Inst., Med. Univ., Szeged, Hung.
 SOURCE: Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen Gesellschaft (1970), 303(7), 593-5
 CODEN: APBDAJ; ISSN: 0376-0367
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 ED Entered STN: 12 May 1984
 AB RCOCH:CHC6H4OMe-m[R = 2,5-, 4,3-, 4,2-, and 2,4-HO(O2N)C6H3] had antibacterial activity against Escherichia coli, Shigella flexneri, Klebsiella pneumoniae, Staphylococcus aureus, and a S. albus strain resistant to streptomycin and polymyxin. The corresponding nitrohydroxyacetophenones had bacteriostatic effects only against the latter 2 species, while I [R = p-MeC6H4, p-FC6H4, p-MeOC6H4, and 2,5-(MeO)2C6H3] had no antibacterial activity.
 CC 8 (Microbial Biochemistry)
 IT 1450-76-6 1834-91-9 6322-56-1 27171-67-1 27171-68-2
 27192-44-5 29926-98-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bactericidal activity of)
 IT 6322-56-1
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(bactericidal activity of)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 27 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1971:29227 HCPLUS
 DOCUMENT NUMBER: 74:29227
 TITLE: Antibacterial effect of new benzylideneflavanones,
 benzylideneacetophenones (chalcones) and other
 acetophenones
 AUTHOR(S): Gabor, Miklos; Sallai, Janos; Szell, Tamas
 CORPORATE SOURCE: Gyogyszerhatastani Intez., SZOTE, Szeged, Hung.
 SOURCE: Acta Pharmaceutica Hungarica (1970), 40(5),
 233-6
 CODEN: APHGAO; ISSN: 0001-6659
 DOCUMENT TYPE: Journal
 LANGUAGE: Hungarian
 ED Entered STN: 12 May 1984
 AB On agar-plates, benzylideneacetophenones inhibited the growth of
 Staphylococcus albus and S. aureus while benzylideneflavones were
 ineffective. The antibacterial effect of the investigated compound
 supposedly was due to the acetophenone component.
 CC 8 (Microbial Biochemistry)
 IT 1450-76-6 1834-91-9 6322-56-1 18778-51-3 18778-54-6
 18778-57-9 18778-60-4 27171-67-1 27171-68-2 27171-69-3
 27192-44-5 30879-49-3
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); BIOL (Biological study)
 (bactericidal activity of)
 IT 6322-56-1
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); BIOL (Biological study)
 (bactericidal activity of)
 RN 6322-56-1 HCPLUS
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 28 OF 101 HCPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1960:44378 HCPLUS
 DOCUMENT NUMBER: 54:44378
 ORIGINAL REFERENCE NO.: 54:8692h-i,8693a-b
 TITLE: Fries rearrangement of some nitrophenolic esters

AUTHOR(S): Szell, T.; Furka, A.; Szilagyi, I.
 CORPORATE SOURCE: Univ. Szeged, Hung.
 SOURCE: Journal of Scientific & Industrial Research (1959), 18B, 325-8
 CODEN: JSIRAC; ISSN: 0022-4456

DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

AB Contrary to the observation of Lindemann and Romanoff (C.A. '24, 91), 2-O2NC6H4OAc (I) has been found to undergo Fries rearrangement to 4,3-HO(O2N)C6H3Ac (II) with an equimolar amount of AlCl3, even in the absence of a solvent. A mixture of II (10 g.), prepared by the method of Brown (C.A. 40, 40423) and 6.7 g. anhydrous AlCl3 heated 25 hrs. at 100°, decomposed with 35 cc. ice and 8 cc. HCl, allowed to stand 24 hrs., extracted thrice with warm CCl4 and twice with C6H6, and treated with 2.5 g. PhNH2 gave 17.8 g. II phenylhydrazone, m. 193-4°. Similarly, in the presence of PhNO2 as a solvent, 2-O2NC6H4OCOEt and 4-O2NC6H4OCOEt (III) (2,4-dinitrophenylhydrazone, m. 243-4°) were isomerized to 4,3-HO(O2N)C6H3COEt, m. 58-61° (phenylhydrazone, brickred needles, m. 110-12°; 2,4-dinitrophenylhydrazone, m. 218-19°), and 2,5-HO(O2N)C6H3COEt m. 93-4° (phenylhydrazone, lemon-yellow, m. 189-90°; 2,4-dinitrophenylhydrazone, m. 230-2°), resp. III, converted to its Na salt and treated with BzCl in C6H6, gave 2,4-BzO(O2N)C6H3COEt (IV), m. 51-2° (petr. ether), in 92% yield. 2,4-BzO(O2N)C6H3Ac (V), 3-O2NC6H4OCOCH2Cl (VI), and 3-O2NC6H4OCOCH2Ph (VII) were prepared likewise by the reaction, in C6H6, of the Na salt of the corresponding nitrophenol with the appropriate acid chloride and m. 104°, 76-8°, and 61-3° (all from EtOH), resp. However, all attempts to carry out Fries rearrangement of IV, V, VI, and VII by refluxing them 2-8 hrs. at 125° in the presence of 1.5 to 5.0 moles of anhydrous AlCl3 failed.

CC 10E (Organic Chemistry: Benzene Derivatives)

IT 50-99-7, Blood sugar

(-lowering substances, sulfonylureas)

IT 6322-56-1P, Acetophenone, 4'-hydroxy-3'-

nitro- 19921-01-8P, Phenol, m-nitro-, chloroacetate

85121-10-4P, Phenol, m-nitro-, phenylacetate 85121-10-4P, Acetic acid,

phenyl-, m-nitrophenyl ester 100961-78-2P, Acetophenone, 2'-

hydroxy-4'-nitro-, benzoate 107922-68-9P,

Acetophenone, 4'-hydroxy-3'-nitro-,

phenylhydrazone

RL: PREP (Preparation)

(preparation of)

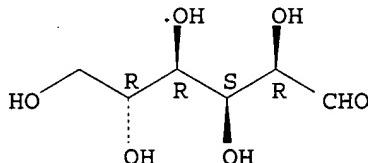
IT 50-99-7, Blood sugar

(-lowering substances, sulfonylureas)

RN 50-99-7 HCPLUS

CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

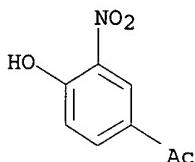


IT 6322-56-1P, Acetophenone, 4'-hydroxy-3'-nitro-

RL: PREP (Preparation)
(preparation of)

RN 6322-56-1 HCPLUS

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



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L130 ANSWER 29 OF 101	USPATFULL on STN	DUPLICATE 2
ACCESSION NUMBER:	2004:233868 USPATFULL	
TITLE:	Heterocyclic modulators of nuclear receptors	
INVENTOR(S):	Martin, Richard, San Diego, CA, UNITED STATES Flatt, Brenton Todd, Poway, CA, UNITED STATES Kahl, Jeffrey Dean, San Diego, CA, UNITED STATES Wang, Tie-Lin, San Diego, CA, UNITED STATES	
PATENT ASSIGNEE(S):	X-Ceptor Therapeutics, Inc., San Diego, CA, 92121 (U.S. corporation)	

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004180942	A1	20040916
	US 7115640	B2	20061003
APPLICATION INFO.:	US 2003-717049	A1	20031118 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-329668, filed on 20 Dec 2002, GRANTED, Pat. No. US 6696473		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-342720P	20011221 (60) <--
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENUE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	66	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	13546	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds, compositions and methods for modulating the activity of nuclear receptors are provided. In particular, heterocyclic compounds are provided for modulating the activity of farnesoid X receptor (FXR), liver X receptor (LXR) and/or orphan nuclear receptors. In certain embodiments, the compounds are thiazolidinone derivatives.

INCL INCLM: 514/369.000
INCLS: 514/376.000; 514/389.000

NCL NCLM: 514/367.000; 514/369.000
NCLS: 514/369.000; 514/370.000; 548/180.000; 548/190.000; 514/376.000;
514/389.000

IC [7]
ICM A61K031-427
ICS A61K031-422
IPCI A61K0031-427 [ICM,7]; A61K0031-422 [ICS,7]
IPCI-2 A61K0031-425 [I,A]; C07D0277-62 [I,A]; C07D0277-04 [I,A];
C07D0277-00 [I,C*]
IPCR C07D0277-00 [I,C*]; C07D0277-20 [I,A]; C07D0277-64 [I,A];
C07D0417-00 [I,C*]; C07D0417-04 [I,A]; C07D0417-06 [I,A];
C07D0417-14 [I,A]; C07D0513-00 [I,C*]; C07D0513-04 [I,A];
C07D0521-00 [I,A]; C07D0521-00 [I,C*]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS CA 139:133557 * WO 03060078 A2 20030724			
* CA Indexing for this record included			
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))			
Section cross-reference(s): 1			
ST phenylimino thiazolylidene thiazolidinone prepn nuclear receptor modulator; farnesoid X receptor modulator phenylimino thiazolylidene thiazolidinone prepn; liver X receptor modulator phenylimino thiazolylidene thiazolidinone prepn; orphan nuclear receptor modulator phenylimino thiazolylidene thiazolidinone prepn			
IT Steroid receptors (LXR (liver X receptor); preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)			
IT Skin, disease (acneiform skin conditions; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)			
IT Antiarteriosclerotics (antiatherosclerotics; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)			
IT Biliary tract, disease (cholestasis; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)			
IT Mucous membrane (disease, disturbed differentiation or excess proliferation; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)			
IT Immunity (disorder; preparation of phenylimino thiazolylidene thiazolidinones and			

other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(dyslipidemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Nuclear receptors
(farnesoid X and orphan, modulators; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(hyperlipidemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipoproteins
(hyperlipoproteinemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(metabolic disorders; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Artery, disease
(peripheral, occlusion; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Skin, disease
(perturbed epidermal barrier function and disturbed differentiation or excess proliferation of the epidermis; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Alzheimer's disease

Anti-Alzheimer's agents

Anti-inflammatory agents

Anticholesteremic agents

Antidiabetic agents

Antibesity agents

Antiparkinsonian agents

Antitumor agents

Atherosclerosis

Calculi, biliary

Cardiovascular agents

Cardiovascular system, disease

Diabetes mellitus

Human

Hypercholesterolemia

Hyperglycemia

Hypertriglyceridemia

Hypolipemic agents

Immunomodulators

Inflammation

Lipodystrophy

Neoplasm

Obesity

Parkinson's disease
(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Brain, disease

(stroke; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Acne

(vulgaris; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 304445-33-8P, 3-[[3-Benzyl-5-(3-methyl-5-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
 562825-02-9P, 2-[(4-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-18-7P,
 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-35-8P,
 2-[(5-Acetyl-2-(ethylamino)phenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-44-9P,
 3'-Benzyl-3-methyl-2'-methylthio-4'-oxo-4-phenyl-3H,4'H-[2,5']bithiazolyliden-3'-ium p-toluenesulfonate 562825-55-2P,
 3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
 562825-57-4P, 3-[[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-89-2P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid tert-butyl ester 562826-17-9P,
 3-Benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxoimidazolidin-4-one 562826-21-5P, 4-Ethylamino-3-[[3-(3-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-49-7P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2,2,2-trifluoroacetamide 562826-64-6P,
 N-[3-[[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-83-9P, Acetic acid [[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]carbamoyl]methyl ester 562827-12-7P, Methyl 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate 562827-15-0P,
 3-[[3-Benzyl-5-(1-methyl-4,5,6,7-tetrahydro-1H-thiazolo[5,4-c]pyridin-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
 562827-17-2P, Methyl 3-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate
 562827-26-3P, 3-[3'-Benzyl-4-(2-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-37-6P, 3'-Benzyl-2'-[(5-cyano-2-ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-[2,5']bithiazolylidene-4-carboxylic acid ethyl ester 562827-57-0P,
 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-65-0P,
 [2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyliden-3-yl]acetic acid methyl ester 562827-70-7P, 2-[2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyliden-3-yl]ethyl acetate 562827-80-9P, 3-[[3-Benzyl-5-(6-ethoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-84-3P, 3-[[3-Benzyl-5-(6-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-96-7P, 3-[[3-Benzyl-5-[6-(2-

hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-06-2P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoroacetamide
 562828-07-3P, 3-[[5-(6-Amino-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-08-4P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N',N''-di(tert-butoxycarbonyl)guanidine 562828-14-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N-(3-cyanopropyl)-2,2,2-trifluoroacetamide
 (drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 300361-31-3P, 3-Allyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 300716-97-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 304445-27-0P, 4-Ethylamino-3-[[3-ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 304445-29-2P, 3-[[3-Allyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 304445-31-6P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-phenylthiazolidin-2-ylidene]amino]benzonitrile 304447-32-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(naphthalen-1-ylimino)thiazolidin-4-one 304447-69-6P, 3-Benzyl-2-benzylimino-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 306317-03-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one 306317-09-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-phenyliminothiazolidin-4-one 306317-87-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[4-(morpholin-4-yl)phenyl]imino]thiazolidin-4-one 309735-39-5P, 2-[(4-Cyclohexylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-phenylthiazolidin-4-one 337918-67-9P, 3-[[3-Benzyl-5-(5-chloro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 354775-87-4P, 3-[[3-Cyclohexyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562825-00-7P, 3-Benzyl-2-[(4-methoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-01-8P, 3-Benzyl-2-[[4-(dimethylamino)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-03-0P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one 562825-04-1P, 2-[(2-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-05-2P, 3-Benzyl-2-[[4-(benzyloxy)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-06-3P, 3-Benzyl-2-[(2-hydroxynaphth-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-07-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-08-5P, 3-Benzyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-09-6P, 3-Benzyl-2-[(2-ethylamino-5-nitrophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-10-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[3-

(trifluoromethyl)phenyl]imino]thiazolidin-4-one 562825-11-0P,
 2-[(3-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-12-1P, 3-Benzyl-2-[(3-chlorophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-13-2P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(2-propylphenyl)imino]thiazolidin-4-one 562825-14-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-15-4P, 3-Benzyl-2-[(2-ethoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-16-5P,
 N-[3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenylacetamide 562825-17-6P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide 562825-19-8P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-3-ylimino)thiazolidin-4-one 562825-20-1P, N-[3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethoxyphenyl]acetamide 562825-21-2P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-4-ylimino)thiazolidin-4-one 562825-22-3P, 4-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-23-4P,
 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(4-(trifluoromethoxy)phenyl)imino]thiazolidin-4-one 562825-24-5P,
 3-Benzyl-2-(1H-indazol-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-25-6P, 3-Benzyl-2-[(4-(imidazol-1-yl)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-26-7P, 2-(Benz[1,3]dioxol-5-ylimino)-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-27-8P,
 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-28-9P, 3-Benzyl-2-[(2-(ethylamino)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-29-0P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-30-3P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-31-4P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(dimethylamino)benzonitrile 562825-32-5P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(tert-butylamino)benzonitrile 562825-33-6P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2,2,2-trifluoroethyl)amino]benzonitrile 562825-34-7P, 3-[(3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(piperidin-1-yl)benzonitrile 562825-36-9P, 3-[(3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-37-0P, 4-(Dimethylamino)-3-[(3-ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-38-1P, 3-[(3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-40-5P, 3-[(3-Butyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-41-6P, 3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-42-7P, 3'-Benzyl-3-methyl-4-phenyl-2'-thioxo-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562825-45-0P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]phenylacetamide 562825-46-1P, 2'-[(5-Acetyl-2-(ethylamino)phenyl)imino]-3'-benzyl-3-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562825-48-3P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-

[2,5']bithiazolyliden-2'-ylideneamino)-4-(ethylamino)benzonitrile
562825-49-4P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)phenyl]acetamide 562825-50-7P,
N-[4-(3'-Benzyl-3-methyl-4'-oxo-[2,5']bithiazolidinyliden-2'-ylideneamino)phenyl]acetamide 562825-53-0P, 3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-(ethylamino)benzonitrile 562825-54-1P, 3-[[3-Benzyl-5-[3-methyl-5-(trifluoromethyl)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-56-3P,
Dimethylcarbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester
562825-58-5P, 3-[[3-Benzyl-5-[3-methyl-5-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-59-6P, 3-[[3-Benzyl-5-(1,3-dimethyl-1,3-dihydrobenzimidazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-60-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-8-ylimino)thiazolidin-4-one
562825-61-0P, 3-Benzyl-2-[(8-hydroxyquinolin-5-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-62-1P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-butylaminobenzonitrile 562825-63-2P,
4-Benzylamino-3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-64-3P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyclopentylaminobenzonitrile 562825-65-4P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-ylamino)benzonitrile 562825-66-5P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-yl)benzonitrile 562825-67-6P,
3-Benzyl-2-(isoquinolin-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-68-7P, 3-Benzyl-2-(isoquinolin-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one
562825-69-8P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562825-70-1P,
2-[(4-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-71-2P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide
562825-72-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(naphthalen-2-ylimino)thiazolidin-4-one 562825-73-4P,
3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-2-ylimino)thiazolidin-4-one 562825-74-5P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamide
562825-75-6P, N-Acetyl-4-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamide
562825-77-8P, 2-[(3-Acetylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-78-9P,
N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)amino]pyridin-2-yl]acetamide 562825-79-0P, N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562825-80-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-81-4P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene]amino]benzonitrile 562825-82-5P, 4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-83-6P, 2-[(5-Acetyl-2-methylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-

ylidene)thiazolidin-4-one 562825-84-7P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2,2,2-trifluoroacetamide 562825-85-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid methyl ester 562825-86-9P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-phenethylthiazolidin-2-ylidene]amino]benzonitrile 562825-87-0P, 2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-90-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid 562825-91-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2-hydroxyethyl)amino]benzonitrile 562825-92-7P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyanophenyl]amino]acetic acid methyl ester 562825-93-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-ethyl-4-ethylaminobenzamide 562825-94-9P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyanophenyl]amino]acetic acid 562825-96-1P, 3-Benzyl-2-[[4-(ethylamino)pyridin-3-yl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-97-2P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-3-ethylaminophenyl]acetamide 562825-98-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[[2-(dimethylamino)ethyl]amino]benzonitrile 562826-00-0P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-ethyl-3-ethylaminobenzamide 562826-03-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-[2-(dimethylamino)ethyl]-4-ethylaminobenzamide 562826-06-6P, 3-Benzyl-2-[[5-(4,5-dihydrooxazol-2-yl)-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-07-7P, 3-[[3-Benzyl-5-(1-methyl-1H-quinolin-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-08-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(1-methyl-1H-quinolin-2-ylidene)thiazolidin-4-one 562826-10-2P, 2-[(3-Acetylphenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-11-3P, N-[4-[[3-Furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-12-4P, [2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]acetic acid methyl ester 562826-13-5P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562826-14-6P, 2-[(5-Acetyl-2-ethoxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-15-7P, 2-[(5-Acetyl-2-hydroxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-18-0P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)imidazolidin-4-one 562826-19-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-[2-(morpholin-4-yl)ethyl]-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-20-4P, 4-Ethylamino-3-[[3-(4-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-22-6P, 4-Ethylamino-3-[[3-(2-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-24-8P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]succinic acid 562826-25-9P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]benzenesulfonamide

562826-26-0P, Thiophene-2-sulfonic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]amide
562826-27-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-3-methoxybenzamide 562826-28-2P,
N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-29-3P,
[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-30-6P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-1,1-dimethylurea 562826-31-7P,
N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-32-8P,
N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-33-9P,
N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-34-0P,
[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-35-1P,
N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-36-2P,
N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-37-3P,
4-Ethylamino-3-[[3-(3-hydroxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-39-5P,
4-Ethylamino-3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]acetanilide 562826-40-8P,
4-Ethylamino-3-[[3-(3-fluorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-41-9P,
4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(3-trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile
562826-42-0P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(2-trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile
562826-43-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(3-methylbenzyl)-4-oxothiazolidin-2-ylidene]amino]benzonitrile
562826-45-3P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(morpholin-4-yl)acetamide 562826-46-4P, 3-[[3-(3-Chlorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile
562826-47-5P, 3-[[3-(3-Bromobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile
562826-51-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-53-3P,
4-Methylpiperazine-1-carboxylic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]amide 562826-54-4P, 2-[(5-Amino-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-55-5P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(4-methylpiperazin-1-yl)acetamide 562826-57-7P,
N-[3-[[3-Benzyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-59-9P
, N-[3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-67-9P, N-[3-[[3-Benzyl-5-(5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-

ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide
 562826-69-1P, N-[3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide
 562826-70-4P, N-[3-[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-71-5P,
 N-[3-[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-73-7P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-74-8P,
 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-75-9P,
 N-[3-[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide
 562826-76-0P, N-[4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-78-2P, N-[3-[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide
 562826-79-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-81-7P, N-[3-[[5-[5-[2-(Dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-84-0P, N-[3-[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-hydroxyacetamide 562826-85-1P, N-[3-[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-hydroxyacetamide 562826-86-2P, 2-[(3-Acetylphenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-87-3P,
 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-89-5P, N-[4-Ethylamino-3-[[3-furan-2-ylmethyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-90-8P,
 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-91-9P,
 N-[3-[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-93-1P, N-[3-[[5-[5-(2-Aminoethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-96-4P,
 2-(Dimethylamino)-N-[3-[[3-furan-2-ylmethyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide
 562826-97-5P, 3-(3'-Benzyl-3,4,5-trimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
 562826-98-6P, 3-[[3-Benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
 562826-99-7P, 3-(3'-Benzyl-4-ethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-ethylaminobenzonitrile
 562827-00-3P, 3-[3'-Benzyl-3-methyl-4-(4-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-01-4P, 3-[3'-Benzyl-4-(4-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-02-5P, 3-[3'-Benzyl-4-(4-chlorophenyl)-3-

methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-03-6P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-p-tolyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-04-7P, 3-[3'-Benzyl-4-(4-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-05-8P, 3-(5-Acetyl-3'-benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-06-9P, 3-[[3-Benzyl-5-(3-methyl-3,4,5,6-tetrahydrocyclopentathiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-07-0P, 3-(3'-Benzyl-3-methyl-4'-oxo-4,5-diphenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-08-1P, 3-(3'-Benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-09-2P, 4-Ethylamino-3-[[5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene]amino]benzonitrile 562827-13-8P, Methyl 4-[[2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate 562827-14-9P, 4-[[2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoic acid 562827-18-3P, 3-[[2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoic acid 562827-19-4P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-20-7P, 3-[3'-Benzyl-4-(biphenyl-4-yl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-21-8P, 3-[3'-Benzyl-3-methyl-4-(naphthalen-2-yl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-22-9P, 3-[3'-Benzyl-4-(4-bromophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-23-0P, 3-[3'-Benzyl-3-methyl-4-(2-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-24-1P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562827-27-4P, 3-[3'-Benzyl-4-(3-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-28-5P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-29-6P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethoxyphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-30-9P, 3-[3'-Benzyl-4-(2,4-dimethoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-31-0P, 3-(3'-Benzyl-5-ethyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-32-1P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(2-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-33-2P, 3-[3'-Benzyl-4-(3-bromophenyl)-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-34-3P, 3-[3'-Benzyl-4-(3-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-35-4P, 3-Benzyl-2-[[4-(1,1,1,3,3,3-hexafluoro-2-hydroxyisopropyl)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-36-5P, 3-(3'-Benzyl-4-chloromethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-

ethylaminobenzonitrile 562827-38-7P, 3-(4,3'-Dibenzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylidene-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-39-8P, 3'-Benzyl-2'-(5-cyano-2-ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-[2,5']bithiazolylidene-4-carboxylic acid 562827-40-1P, 3-Benzyl-2-[[2-ethylamino-5-(1-hydroxyethyl)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-41-2P, 3-[3'-Benzyl-4-(2-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylidene-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-42-3P, 3-Benzyl-2-[[2-ethylamino-5-[1-(hydroxyimino)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-43-4P, 3-Benzyl-2-[[2-ethylamino-5-[1-(methoxyimino)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-44-5P, 3-Benzyl-2-[[5-[1-(benzyloxy)imino]ethyl]-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-45-6P, 3-Benzyl-2-[[2-ethylamino-5-[1-(phenylhydrazone)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-46-7P, 3-(4,3'-Dibenzyl-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylidene-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-47-8P, 3-[[3-Cyclohexylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-48-9P, 3-[3'-Benzyl-4-(3-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylidene-2'-ylideneamino]-4-ethylaminobenzonitrile

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 562827-51-4P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,5-dimethyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one
 562827-52-5P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,4-dimethyl-5-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one
 562827-53-6P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(4-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one
 562827-54-7P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-4,3'-dibenzyl-3-methyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-55-8P,
 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(2-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-56-9P,
 3-[[3-Benzyl-5-[5-[2-(dimethylamino)acetyl]-1-methyl-4,5,6,7-tetrahydro-1H-thiazolo[5,4-c]pyridin-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-58-1P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-hydroxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-59-2P,
 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3,3'-dibenzyl-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-60-5P,
 N-[3-[[3-Benzyl-5-[5-(2-acetoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-61-6P, 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-methoxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-63-8P,
 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(3-methoxypropyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562827-67-2P, [2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-

4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyliden-3-yl]acetic acid
562827-71-8P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-hydroxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-73-0P, N-[3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-methoxyacetamide 562827-74-1P, N-[3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-76-3P, 3-Allyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-77-4P, 3-Cyclohexyl-2-[(2-hydroxynaphthalen-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-78-5P, 3-Allyl-2-(2-hydroxynaphthalen-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-79-6P, 3-[[3-Benzyl-5-(6-fluoro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-81-0P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-propylthiazolidin-2-ylidene]amino]benzonitrile 562827-82-1P, 3-[[3-Benzyl-5-(3-methyl-6-nitro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-83-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]acetamide 562827-85-4P, Ethylcarbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-86-5P, [[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid methyl ester 562827-87-6P, 2-[[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetamide 562827-88-7P, (2-Chloroethyl)carbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-89-8P, 3-[[3-Benzyl-5-[3-methyl-5-(2-methylaminoethoxy)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-90-1P, 3-[[3-Benzyl-5-[5-(3-hydroxypropoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-91-2P, (3-Chloropropyl)carbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-92-3P, 3-[[3-Benzyl-5-[2-(4-methylpiperazin-1-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-93-4P, 3-[[3-Benzyl-5-[3-methyl-5-[2-(piperidin-1-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-94-5P, 3-[[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-95-6P, [[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid 562827-97-8P, 3-[[3-Benzyl-5-[6-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-98-9P, 3-[[3-Benzyl-5-[3-methyl-6-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-99-0P, 3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-00-6P, 3-[[3-Benzyl-5-(3-methyl-4-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-01-7P, 3-[[3-Benzyl-5-(3-methyl-4-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile

3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-02-8P, 3-[[3-Benzyl-5-(3-methyl-4-chloro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-03-9P, 3-[[3-Benzyl-5-(3-methyl-6-trifluoromethoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-04-0P, 3-[[3-Benzyl-5-(3,5,6-trimethyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-05-1P, 3-[[3-Benzyl-5-(3-methyl-5-acetamido-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-09-5P, 3-[[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-1,1-dimethylurea 562828-11-9P, 3-[[5-(5-Amino-3-methyl-3H-benzothiazol-2-ylidene)-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-12-0P, [2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]carbamic acid ethyl ester 562828-13-1P, N-[2-[3-Benzyl-2-[(5-cyano-2-[(ethyl)(2-morpholin-4-ylethyl)amino]phenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-2,2,2-trifluoroacetamide 562828-15-3P, 3-[[3-Benzyl-5-[3-methyl-6-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-16-4P, 3-[[3-Benzyl-5-[3-methyl-6-[(2-(piperidin-1-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-17-5P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoro-N-[2-(morpholin-4-yl)ethyl]acetamide 562828-18-6P, 3-[[3-Benzyl-5-[3-methyl-5-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-19-7P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]guanidine 562828-20-0P, 3-[[3-Benzyl-5-[3-methyl-6-[(4-trifluoromethylbenzyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-21-1P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N-(3-fluoropropyl)-2,2,2-trifluoroacetamide 562828-23-3P, 3-[[3-Benzyl-5-[6-[(3-cyanopropyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-24-4P, 3-[[3-Benzyl-5-[6-[(3-hydroxypropyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-25-5P, 3-[[3-Benzyl-5-[6-[(2-methoxyethyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-26-6P, 3-Phenyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-benzyliminothiazolidin-4-one

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 62-53-3, Aniline, reactions 70-23-5, Ethyl bromopyruvate 75-31-0, Isopropylamine, reactions 75-64-9, tert-Butylamine, reactions 78-95-5, Chloroacetone 79-44-7, Dimethylcarbamoyl chloride 80-48-8, Methyl p-toluenesulfonate 91-59-8, 2-Naphthylamine 94-70-2, o-Phenetidine 95-54-5, 1,2-Phenylenediamine, reactions 96-32-2, Methyl 2-bromoacetate 98-09-9, Benzenesulfonyl chloride 98-16-8, 3-(Trifluoromethyl)aniline 99-03-6, 3'-Aminoacetophenone 99-09-2, 3-Nitroaniline 99-73-0, 2,4'-Dibromoacetophenone 99-81-0, 2-Bromo-4'-nitroacetophenone 99-92-3, 4'-Aminoacetophenone 99-98-9,

N,N-Dimethyl-1,4-phenylenediamine 100-46-9, Benzylamine, reactions
100-63-0, Phenylhydrazine 102-28-3, 3'-Aminoacetanilide 104-94-9
106-50-3, 1,4-Phenylenediamine, reactions 107-10-8, Propylamine,
reactions 107-11-9, Allylamine 108-00-9, N,N-Dimethylethylenediamine
108-30-5, Succinic anhydride, reactions 108-42-9, 3-Chloroaniline
108-45-2, 1,3-Phenylenediamine, reactions 108-91-8, Cyclohexylamine,
reactions 109-01-3, 1-Methylpiperazine 109-73-9, Butylamine,
reactions 109-85-3, 2-Methoxyethylamine 109-90-0, Ethyl isocyanate
110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions
118-92-3, Anthranilic acid 120-53-6, 6-Ethoxy-2-mercaptopbenzothiazole
122-80-5, 4'-Aminoacetanilide 123-75-1, Pyrrolidine, reactions
134-32-7, 1-Naphthylamine 135-73-9, 2-Bromo-4'-phenylacetophenone
144-80-9 351-28-0, 3'-Fluoroacetanilide 352-91-0,
1-Bromo-3-fluoropropane 364-76-1, 4-Fluoro-3-nitroaniline 383-53-9,
2-Bromo-4'-trifluoromethylacetophenone 402-49-3, 4-
(Trifluoromethyl)benzyl bromide 403-29-2, 2-Bromo-4'-fluoroacetophenone
447-31-4, 2-Chloro-2-phenylacetophenone 453-71-4, 4-Fluoro-3-
nitrobenzoic acid 461-82-5, 4-(Trifluoromethoxy)aniline 462-08-8,
3-Aminopyridine 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine
534-07-6, 1,3-Dichloroacetone 536-38-9, 2-Bromo-4'-chloroacetophenone
578-66-5, 8-Aminoquinoline 580-15-4, 6-Aminoquinoline 583-39-1,
2-Mercaptobenzimidazole 611-34-7, 5-Aminoquinoline 613-54-7,
2-Bromo-2'-acetonaphthone 615-22-5, 2-(Methylthio)benzothiazole
616-34-2, Glycine methyl ester 619-41-0, 2-Bromo-4'-methylacetophenone
619-45-4, Methyl 4-aminobenzoate 622-78-6, Benzyl isothiocyanate
627-18-9 627-42-9, 2-Chloroethyl methyl ether 635-22-3,
4-Chloro-3-nitroaniline 694-28-0, 2-Chlorocyclopentanone 722-92-9,
4-(1,1,1,3,3,3-Hexafluoro-2-hydroxyisopropyl)aniline 816-40-0,
1-Bromo-2-butanone 822-87-7, 2-Chlorocyclohexanone 877-35-0,
2-Bromobutyrophenone 937-38-2, 1-Chloro-3-phenylpropan-2-one
1003-03-8, Cyclopentylamine 1009-35-4, 4-Fluoro-3-nitrobenzonitrile
1118-68-9, N,N-Dimethylglycine 1125-60-6, 5-Aminoisoquinoline
1129-28-8, Methyl 3-(bromomethyl)benzoate 1198-27-2, 1-Amino-2-naphthol
hydrochloride 1477-42-5, 2-Amino-4-methylbenzothiazole 1532-84-9,
1-Aminoisoquinoline 1694-29-7, 3-Chloro-2,4-pentanedione 1711-05-3,
3-Methoxybenzoyl chloride 1744-22-5, 2-Amino-6-
(trifluoromethoxy)benzothiazole 1821-39-2, 2-Propylaniline 1943-83-5,
2-Chloroethyl isocyanate 2008-75-5, 1-(2-Chloroethyl)piperidine
hydrochloride 2038-03-1, N-(2-Aminoethyl)morpholine 2103-88-0,
2-Mercapto-4-phenylthiazole 2114-00-3, 2-Bromopropiophenone
2221-00-3, 4-(1H-Imidazol-1-yl)aniline 2237-30-1, 3-Aminobenzonitrile
2257-09-2, Phenethyl isothiocyanate 2365-48-2, Methyl thioglycolate
2382-96-9, 2-Mercaptobenzoxazole 2524-67-6, 4-(Morpholin-4-yl)aniline
2632-13-5, 2-Bromo-4'-methoxyacetophenone 2687-43-6,
O-Benzylhydroxylamine hydrochloride 2740-85-4, 3-
(Trifluoromethyl)benzyl isothiocyanate 2835-68-9, 4-Aminobenzamide
2912-62-1, Chlorophenylacetyl chloride 3544-24-9, 3-Aminobenzamide
3647-69-6, 4-(2-Chloroethyl)morpholine hydrochloride 3694-57-3,
4-Methoxybenzyl isothiocyanate 3694-58-4, 3-Chlorobenzyl isothiocyanate
3696-66-0, 3-Methylbenzyl isothiocyanate 3845-33-8, 3-Bromobenzyl
isothiocyanate 4091-39-8, 3-Chloro-2-butanone 4214-76-0,
2-Amino-5-nitropyridine 4274-38-8, 2-Amino-4-
(trifluoromethyl)benzenethiol hydrochloride 4518-10-9, Methyl
3-aminobenzoate 4650-60-6, 2-Furfuryl isothiocyanate 4800-27-5,
1-Methylquinoline-2-thione 4845-58-3, 2-Mercapto-6-nitrobenzothiazole
5000-65-7, 2-Bromo-3'-methoxyacetophenone 5331-91-9,
5-Chloro-2-mercaptobenzothiazole 5332-06-9, 4-Bromobutyronitrile

5332-73-0, 3-Methoxypropylamine 5464-79-9, 2-Amino-4-methoxybenzothiazole 5465-65-6, 4'-Chloro-3'-nitroacetophenone
5685-05-2, 2-Mercaptothiazole 6232-11-7, Methyl 4-(aminomethyl)benzoate hydrochloride 6321-11-5, 4-Aminothymol hydrochloride 6322-56-1, 4'-Hydroxy-3'-nitroacetophenone 6373-46-2, 4-Benzylloxyaniline 6373-50-8, 4-Cyclohexylaniline 6482-24-2, 2-Bromoethyl methyl ether 6851-99-6, 2-Bromo-2'-nitroacetophenone 7340-70-7, 2-Mercapto-6-acetamidobenzothiazole 7442-07-1, 6-Amino-2-mercaptopbenzothiazole 7648-01-3, N-Ethylrhodanine 10112-15-9, N-Ethyl-2-nitroaniline 10574-69-3, N-Benzylrhodanine 13010-19-0, 3-Chloropropyl isocyanate 13091-23-1, 4-Chloro-3-nitropyridine 13207-66-4, 5-Aminoquinolin-8-ol 13515-93-0, Sarcosine methyl ester hydrochloride 14268-66-7, 3,4-(Methylenedioxy)aniline 16596-41-1, 1-Aminopyrrolidine 16629-19-9, 2-(Thiophene)sulfonyl chloride 17026-81-2, N-(3-Amino-4-ethoxyphenyl)acetamide 17420-30-3, 5-Nitroanthranilonitrile 17608-09-2, 2-Methoxybenzyl isothiocyanate 19335-11-6, 5-Aminoindazole 19952-47-7, 2-Amino-4-chlorobenzothiazole 19975-56-5, 2-Methylthio-2-thiazoline 21086-33-9, 2-Bromo-4'-methoxypropiophenone 21726-71-6, 2-Bromo-3'-methoxypropiophenone 24767-67-7, 3-Chloro-1-phenylbutan-2-one 29927-08-0, 2-Amino-5,6-dimethylbenzothiazole 31949-21-0, 2-Bromo-2'-methoxyacetophenone 38818-50-7, 4-Chloro-3-nitrobenzoyl chloride 51552-16-0, N,N-Dimethylaminoacetyl chloride 51929-59-0, 2-(Trifluoromethyl)benzyl isothiocyanate 52395-66-1, Cyclohexylmethyl isothiocyanate 53631-18-8, 2-Bromo-3'-fluoroacetophenone 54109-16-9 55514-14-2, 3-Methyl-2-(methylthio)benzothiazol-3-ium p-toluenesulfonate 55690-60-3, 2-Mercapto-5-methoxybenzothiazole 60965-26-6, 2-Bromo-2',4'-dimethoxyacetophenone 63351-94-0, 3-Fluorobenzyl isothiocyanate 66668-41-5, N1-Ethyl-4-nitrobenzene-1,2-diamine 75272-77-4, 3-Methoxybenzyl isothiocyanate 76650-08-3, 2,3'-Dibromopropiophenone 80087-71-4, 6-Fluoro-2-mercaptopbenzothiazole 103962-10-3, 2-Bromo-4'-(trifluoromethoxy)acetophenone 135333-25-4, 2-Bromo-2'-methoxypropiophenone 143174-02-1, 3-Amino-4-(ethylamino)benzonitrile 145013-05-4, N,N'-Di(tert-butoxycarbonyl)thiourea 147342-57-2, 3-Picolyl isothiocyanate hydrobromide 149789-77-5, Rhodanine-3-acetic acid methyl ester 157160-99-1, 4-Chloro-3-nitrobenzoic acid tert-butyl ester 157665-51-5, 3-Fluoro-4-nitrobenzoyl chloride 183251-94-7, 3-Amino-4-(dimethylamino)benzonitrile 196394-40-8, 5'-Amino-2'-cyanoacetanilide 199916-98-8, 3-Methyl-2-methylthio-4,5,6,7-tetrahydrobenzothiazol-3-ium p-toluenesulfonate 355022-20-7, 3-Amino-4-(isopropylamino)benzonitrile 448948-73-0, Methyl 3-(isothiocyanatomethyl)benzoate 562825-47-2, 3'-Amino-4'-(ethylamino)acetophenone 562826-09-9, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzylthiazolidin-4-one 562826-58-8, 3'-Amino-2-(dimethylamino)-4'-ethylaminoacetanilide 562826-77-1, 3'-Amino-4'-ethylamino-2-methoxyacetanilide 562826-88-4, 5-(2-Methoxyethoxy)-2-(methylthio)benzothiazole 562827-10-5, 4-Ethylamino-3-[(4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene)amino]benzonitrile 562827-16-1, 3-Bromo-4-oxopiperidine-1-carboxylic acid 9H-fluoren-9-ylmethyl ester 562827-25-2, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-[(pyridin-3-yl)methyl]thiazolidin-4-one (preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

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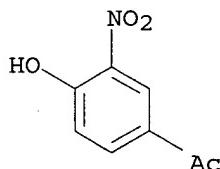
345-30-2P, 3'-Fluoro-4'-nitroacetanilide 2788-74-1P,
4-Ethylamino-3-nitrobenzoic acid 3048-46-2P, 4-Methoxybenzothiazole 3235-69-6P, Morpholin-4-ylacetic acid 3507-36-6P, 4-Methoxy-2-

methylthiobenzothiazole 4773-35-7P, 1-Chloro-1-phenylpropan-2-one
5093-64-1P, N-(5-Nitropyridin-2-yl)acetamide 5540-60-3P,
N-(4-Chloro-3-nitrophenyl)acetamide 6322-59-4P, 3-Cyclohexylrhodanine
23420-87-3P, 2-Mercapto-5-(trifluoromethyl)benzothiazole 23838-73-5P,
N-Ethyl-1,2-phenylenediamine 24430-26-0P, 4'-Ethoxy-3'-
nitroacetophenone 35009-16-6P, Methyl 4-(isothiocyanatomethyl)benzoate
36894-61-8P, 5-Acetamidobenzothiazole 41270-42-2P, Triethylammonium
benzyldithiocarbamate 41504-13-6P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-
2-ylidene)-2-thioxothiazolidin-4-one 55514-13-1P, 1-Methyl-2-
methylthioquinolinium p-toluenesulfonate 56813-48-0P,
5-Amino-2-methylthiobenzothiazole 58759-62-9P, 5-Acetamido-2-
mercaptopbenzothiazole 60853-81-8P, N,N-Dimethylaminoacetyl chloride
hydrochloride 63224-35-1P, N-(2-Isothiocyanatoethyl)morpholine
64910-45-8P, 4-Methylamino-3-nitrobenzonitrile 64910-46-9P,
3-Amino-4-(methylamino)benzonitrile 73894-38-9P, 2-Cyano-4-
nitroacetanilide 76209-01-3P, 4'-Mercapto-3'-nitroacetanilide
77008-07-2P, 3,5-Dimethyl-4-phenyl-3H-thiazole-2-thione 79610-23-4P,
3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxothiazolidin-4-one
90607-40-2P, 4-Ethylamino-3-nitroaniline 90895-33-3P,
3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-thioxothiazolidin-4-one
99987-79-8P, N-Ethyl-4-ethylamino-3-nitrobenzamide 105550-72-9P,
Triethylammonium N-(2-hydroxyethyl)dithiocarbamate 108018-02-6P,
3'-Amino-4'-mercaptopacetanilide 108859-12-7P, 3-Ethyl-5-(3-methyl-3H-
benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium
p-toluenesulfonate 116091-85-1P, 4-Chloro-N-(2-hydroxyethyl)-3-
nitrobenzamide 167982-24-3P, Morpholin-4-ylacetyl chloride
hydrochloride 180863-54-1P, Methyl 3-(azidomethyl)benzoate
202279-85-4P, 3'-Ethylamino-4'-nitroacetanilide 294193-71-8P,
2-(Dimethylamino)-3'-nitroacetanilide 339556-33-1P,
2-Methylthio-6-(trifluoroacetamido)benzothiazole 380330-17-6P,
1-Butyl-3-(3-cyanophenyl)thiourea 396652-42-9P, 4-Ethylamino-3-
nitrobenzoic acid methyl ester 562824-99-1P, 3-Benzyl-5-(3-methyl-3H-
benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium
p-toluenesulfonate 562825-39-2P, 3-[(3-Butyl-4-oxothiazolidin-2-
ylidene)amino]benzonitrile 562825-51-8P, 1-Benzyl-3-(5-cyano-2-
ethylaminophenyl)thiourea 562825-52-9P, 3-[(3-Benzyl-4-oxothiazolidin-2-
ylidene)amino]-4-(ethylamino)benzonitrile 562825-76-7P,
2-[(3-Acetylphenyl) imino]-3-(pyridin-3-ylmethyl)thiazolidin-4-one
562825-88-1P, 4-Ethylamino-3-nitrobenzoic acid tert-butyl ester
562825-95-0P, 4-Ethylamino-3-nitropyridine 562825-99-4P,
N-Ethyl-3-ethylamino-4-nitrobenzamide 562826-01-1P,
4-Chloro-N-[2-(dimethylamino)ethyl]-3-nitrobenzamide 562826-02-2P,
N-[2-(Dimethylamino)ethyl]-4-ethylamino-3-nitrobenzamide 562826-04-4P,
4-(4,5-Dihydrooxazol-2-yl)-N1-ethylbenzene-1,2-diamine 562826-05-5P,
(Ethyl)[4-(4,5-Dihydrooxazol-2-yl)-2-nitrophenyl]amine 562826-16-8P,
3-Benzyl-1-methyl-2-thioxoimidazolidin-4-one 562826-23-7P,
2-[(3-Aminophenyl) imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-
ylidene)thiazolidin-4-one 562826-38-4P, 4'-Ethylamino-3'-
nitroacetanilide 562826-44-2P, 4'-Ethylamino-2-(morpholin-4-yl)-3'-
nitroacetanilide 562826-48-6P, 4'-Ethylamino-3'-nitro-2,2,2-
trifluoroacetanilide 562826-50-0P, 2-(Dimethylamino)-4'-ethylamino-3'-
nitroacetanilide 562826-52-2P, 4-Methylpiperazine-1-carboxylic acid
N-(4-ethylamino-3-nitrophenyl)amide 562826-56-6P, 4'-Ethylamino-2-(4-
methylpiperazin-1-yl)-3'-nitroacetanilide 562826-60-2P,
5-(2-Chloroethoxy)-2-methylthiobenzothiazole 562826-61-3P,
5-Hydroxy-2-methylthiobenzothiazole 562826-63-5P, 3-Benzyl-5-[5-(2-
chloroethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-

thiazolium p-toluenesulfonate 562826-66-8P, 3-Benzyl-5-[5-(2-methoxyethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate 562826-68-0P, 4'-Ethylamino-2-methoxy-3'-nitroacetanilide 562826-72-6P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-80-6P, N-[4-Ethylamino-3-[[3-(furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-82-8P, 2-Acetoxy-4'-ethylamino-3'-nitroacetanilide 562826-92-0P, N-[3-[[5-[5-(2-Azidoethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-94-2P, 2-(Dimethylamino)-N-[3-[[3-(furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-95-3P, 3'-Amino-2-(dimethylamino)acetalide 562827-11-6P, Methyl 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-4-oxothiazolidin-3-yl]methyl]benzoate 562827-62-7P, Triethylammonium N-(2-methoxyethyl)dithiocarbamate 562827-64-9P, Triethylammonium N-(3-methoxypropyl)dithiocarbamate 562827-66-1P, Triethylammonium N-[(methoxycarbonyl)methyl]dithiocarbamate 562827-68-3P, 2-(5-Methyl-4-phenyl-2-thioxo-2,3-dihydrothiazol-3-yl)ethyl acetate 562827-69-4P, 3-(2-Hydroxyethyl)-5-methyl-4-phenyl-3H-thiazole-2-thione 562827-72-9P, 3'-Benzyl-3,5-dimethyl-4-phenyl-2'-thioxo-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562828-10-8P, 2-Methylthio-5-(2,2,2-trifluoroacetamido)benzothiazole

(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 566213-02-3, 1: PN: WO03060078 SEQID: 1 unclaimed DNA 566213-04-5, 3: PN: WO03060078 SEQID: 3 unclaimed DNA 566213-06-7, 5: PN: WO03060078 SEQID: 5 unclaimed DNA 566213-08-9, 7: PN: WO03060078 SEQID: 7 unclaimed DNA 566213-10-3, 9: PN: WO03060078 SEQID: 9 unclaimed DNA 566213-12-5 566213-14-7 566213-16-9 566213-18-1
 (unclaimed nucleotide sequence; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- IT 566213-03-4 566213-05-6 566213-07-8 566213-09-0 566213-11-4
 566213-13-6 566213-15-8 566213-17-0 566213-19-2
 (unclaimed protein sequence; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- IT 6322-56-1, 4'-Hydroxy-3'-nitroacetophenone
 (preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- RN 6322-56-1 USPATFULL
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 30 OF 101 USPATFULL on STN DUPLICATE 3
 ACCESSION NUMBER: 2003:300885 USPATFULL
 TITLE: Heterocyclic modulators of nuclear receptors
 INVENTOR(S): Martin, Richard, San Diego, CA, UNITED STATES

Flatt, Brenton Todd, Poway, CA, UNITED STATES
 Kahl, Jeffrey Dean, San Diego, CA, UNITED STATES
 Wang, Tie-Lin, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003212111	A1	20031113	
	US 6696473	B2	20040224	
APPLICATION INFO.:	US 2002-329668	A1	20021220 (10)	<--

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-342720P	20011221 (60)	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	HELLER EHRMAN WHITE & MCAULIFFE LLP, 4350 LA JOLLA VILLAGE DRIVE, 7TH FLOOR, SAN DIEGO, CA, 92122-1246		
NUMBER OF CLAIMS:	62		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	11 Drawing Page(s)		
LINE COUNT:	13269		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds, compositions and methods for modulating the activity of nuclear receptors are provided. In particular, heterocyclic compounds are provided for modulating the activity of farnesoid X receptor (FXR), liver X receptor (LXR) and/or orphan nuclear receptors. In certain embodiments, the compounds are thiazolidinone derivatives.

INCL INCLM: 514/340.000
 INCLS: 514/341.000; 514/342.000; 514/369.000; 514/376.000; 514/386.000;
 546/269.700; 546/271.400; 546/274.400; 548/182.000; 548/225.000;
 548/312.700

NCL NCLM: 514/367.000; 514/340.000
 NCLS: 514/369.000; 514/370.000; 548/180.000; 548/190.000; 514/341.000;
 514/342.000; 514/376.000; 514/386.000; 546/269.700; 546/271.400;
 546/274.400; 548/182.000; 548/225.000; 548/312.700

IC [7]
 ICM A61K031-4439
 ICS A61K031-427; A61K031-423; A61K031-4178; C07D417-04; C07D043-04;
 C07D413-04
 IPCI A61K0031-4439 [ICM,7]; A61K0031-4427 [ICM,7,C*]; A61K0031-427
 [ICS,7]; A61K0031-423 [ICS,7]; A61K0031-4178 [ICS,7];
 A61K0031-4164 [ICS,7,C*]; C07D0417-04 [ICS,7]; C07D0417-00
 [ICS,7,C*]; C07D0043-04 [ICS,7]; C07D0413-04 [ICS,7]; C07D0413-00
 [ICS,7,C*]
 IPCI-2 A61K0031-425 [ICM,7]; C07D0277-62 [ICS,7]; C07D0277-04 [ICS,7];
 C07D0277-00 [ICS,7,C*]
 IPCR C07D0277-00 [I,C*]; C07D0277-20 [I,A]; C07D0277-64 [I,A];
 C07D0417-00 [I,C*]; C07D0417-04 [I,A]; C07D0417-06 [I,A];
 C07D0417-14 [I,A]; C07D0513-00 [I,C*]; C07D0513-04 [I,A];
 C07D0521-00 [I,A]; C07D0521-00 [I,C*]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 139:133557 * WO 03060078	A2	20030724

* CA Indexing for this record included

CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

ST phenylimino thiazolylidene thiazolidinone prepn nuclear receptor modulator; farnesoid X receptor modulator phenylimino thiazolylidene thiazolidinone prepn; liver X receptor modulator phenylimino thiazolylidene thiazolidinone prepn; orphan nuclear receptor modulator phenylimino thiazolylidene thiazolidinone prepn

IT Skin, disease
(acneiform skin conditions; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Antiarteriosclerotics
(antiatherosclerotics; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Biliary tract, disease
(cholestasis; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Mucous membrane
(disease, disturbed differentiation or excess proliferation; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Immunity
(disorder; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(dyslipidemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Nuclear receptors
(farnesoid X and orphan, modulators; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(hyperlipidemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipoproteins
(hyperlipoproteinemia; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Lipids, biological studies
(metabolic disorders; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Steroid receptors
(oxy; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Artery, disease
(peripheral, occlusion; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT Skin, disease
(perturbed epidermal barrier function and disturbed differentiation or excess proliferation of the epidermis; preparation of phenylimino

thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT Alzheimer's disease
Anti-Alzheimer's agents
Anti-inflammatory agents
Anticholesteremic agents
Antidiabetic agents
Antibesity agents
Antiparkinsonian agents
Antitumor agents
Atherosclerosis
Calculi, biliary
Cardiovascular agents
Cardiovascular system, disease
Diabetes mellitus
Human
Hypercholesterolemia
Hyperglycemia
Hypertriglyceridemia
Hypolipemic agents
Immunomodulators
Inflammation
Lipodystrophy
Neoplasm
Obesity
Parkinson's disease
(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- IT Brain, disease
(stroke; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- IT Acne
(vulgaris; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)
- IT 304445-33-8P, 3-[[3-Benzyl-5-(3-methyl-5-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
562825-02-9P, 2-[(4-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-18-7P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-35-8P,
2-[[5-Acetyl-2-(ethylamino)phenyl]imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-44-9P,
3'-Benzyl-3-methyl-2'-methylthio-4'-oxo-4-phenyl-3H,4'H-[2,5']bithiazolyliden-3'-ium p-toluenesulfonate 562825-55-2P,
3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
562825-57-4P, 3-[[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]amino]-4-(ethylamino)benzonitrile
562825-89-2P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid tert-butyl ester 562826-17-9P,
3-Benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxoimidazolidin-4-one 562826-21-5P, 4-Ethylamino-3-[[3-(3-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-49-7P, N-[[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-

ethylaminophenyl]-2,2,2-trifluoroacetamide 562826-64-6P,
 N-[3-[[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-
 4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-
 (dimethylamino)acetamide 562826-83-9P, Acetic acid [[3-[[3-benzyl-5-(3-
 methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-
 ethylaminophenyl]carbamoyl]methyl ester 562827-12-7P, Methyl
 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-
 ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate 562827-15-0P,
 3-[[3-Benzyl-5-(1-methyl-4,5,6,7-tetrahydro-1H-thiazolo[5,4-c]pyridin-2-
 ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
 562827-17-2P, Methyl 3-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-
 methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate
 562827-26-3P, 3-[3'-Benzyl-4-(2-methoxyphenyl)-3-methyl-4'-oxo-3',4'-
 dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-
 ethylaminobenzonitrile 562827-37-6P, 3'-Benzyl-2'-[(5-cyano-2-
 ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-
 [2,5']bithiazolyldene-4-carboxylic acid ethyl ester 562827-57-0P,
 2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-methoxyphenyl)-3,5-
 dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyldien-4'-one 562827-65-0P,
 [2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-
 phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyldien-3-yl]acetic acid methyl
 ester 562827-70-7P, 2-[2'-[(5-Acetyl-2-ethylaminophenyl)imino]-3'-
 benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyldien-3-
 yl]ethyl acetate 562827-80-9P, 3-[[3-Benzyl-5-(6-ethoxy-3-methyl-3H-
 benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-
 ethylaminobenzonitrile 562827-84-3P, 3-[[3-Benzyl-5-(6-hydroxy-3-methyl-
 3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-
 ethylaminobenzonitrile 562827-96-7P, 3-[[3-Benzyl-5-[6-(2-
 hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-
 ylidene]amino]-4-ethylaminobenzonitrile 562828-06-2P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-
 ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoroacetamide
 562828-07-3P, 3-[[5-(6-Amino-3-methyl-3H-benzothiazol-2-ylidene)-4-
 oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-08-4P,
 N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-
 ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-N',N''-di(tert-
 butoxycarbonyl)guanidine 562828-14-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-
 ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-
 dihydrobenzothiazol-6-yl]-2,2,2-trifluoro-N-[2-(morpholin-4-
 yl)ethyl]acetamide 562828-22-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-
 ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-
 dihydrobenzothiazol-6-yl]-N-(3-cyanopropyl)-2,2,2-trifluoroacetamide
 (drug candidate; preparation of phenylimino thiazolyldene thiazolidinones
 and other heterocyclic modulators of nuclear receptors with therapeutic
 uses)

- IT 300361-31-3P, 3-Allyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-
 5-ylimino)thiazolidin-4-one 300716-97-6P, 3-[[3-Benzyl-5-(3-methyl-3H-
 benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-
 (ethylamino)benzonitrile 304445-27-0P, 4-Ethylamino-3-[[3-ethyl-5-(3-
 methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-
 ylidene]amino]benzonitrile 304445-29-2P, 3-[[3-Allyl-5-(3-methyl-3H-
 benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-
 ethylaminobenzonitrile 304445-31-6P, 4-Ethylamino-3-[[5-(3-methyl-3H-
 benzothiazol-2-ylidene)-4-oxo-3-phenylthiazolidin-2-
 ylidene]amino]benzonitrile 304447-32-3P, 3-Benzyl-5-(3-methyl-3H-
 benzothiazol-2-ylidene)-2-(naphthalen-1-ylimino)thiazolidin-4-one
 304447-69-6P, 3-Benzyl-2-benzylimino-5-(3-methyl-3H-benzothiazol-2-

ylidene)thiazolidin-4-one 306317-03-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one
306317-09-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-phenyliminothiazolidin-4-one 306317-87-3P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(4-(morpholin-4-yl)phenyl)imino]thiazolidin-4-one 309735-39-5P, 2-[(4-Cyclohexylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-phenylthiazolidin-4-one 337918-67-9P,
3-[[3-Benzyl-5-(5-chloro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 354775-87-4P,
3-[[3-Cyclohexyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562825-00-7P,
3-Benzyl-2-[(4-methoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-01-8P, 3-Benzyl-2-[(4-(dimethylamino)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-03-0P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-6-ylimino)thiazolidin-4-one 562825-04-1P, 2-[(2-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-05-2P,
3-Benzyl-2-[(4-(benzyloxy)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-06-3P, 3-Benzyl-2-[(2-hydroxynaphth-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-07-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-08-5P,
3-Benzyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-09-6P,
3-Benzyl-2-[(2-ethylamino-5-nitrophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-10-9P,
3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[3-(trifluoromethyl)phenyl]imino]thiazolidin-4-one 562825-11-0P,
2-[(3-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-12-1P, 3-Benzyl-2-[(3-chlorophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-13-2P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[(2-propylphenyl)imino]thiazolidin-4-one 562825-14-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-15-4P, 3-Benzyl-2-[(2-ethoxyphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-16-5P,
N-[[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562825-17-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide 562825-19-8P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-3-ylimino)thiazolidin-4-one 562825-20-1P, N-[[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethoxyphenyl]acetamide 562825-21-2P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-4-ylimino)thiazolidin-4-one 562825-22-3P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid methyl ester 562825-23-4P,
3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-[[4-(trifluoromethoxy)phenyl]imino]thiazolidin-4-one 562825-24-5P,
3-Benzyl-2-(1H-indazol-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-25-6P, 3-Benzyl-2-[(4-(imidazol-1-yl)phenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-26-7P, 2-(Benzod[1,3]dioxol-5-ylimino)-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-27-8P,
3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-28-9P, 3-Benzyl-2-[(2-ethylamino)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-

ylidene)thiazolidin-4-one 562825-29-0P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-30-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-31-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(dimethylamino)benzonitrile 562825-32-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(tert-butylamino)benzonitrile 562825-33-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2,2,2-trifluoroethyl)amino]benzonitrile 562825-34-7P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(piperidin-1-yl)benzonitrile 562825-36-9P, 3-[[3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(methylamino)benzonitrile 562825-37-0P, 4-(Dimethylamino)-3-[[3-ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-38-1P, 3-[[3-Ethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(isopropylamino)benzonitrile 562825-40-5P, 3-[[3-Butyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-41-6P, 3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-(quinolin-5-ylimino)thiazolidin-4-one 562825-42-7P, 3'-Benzyl-3-methyl-4-phenyl-2'-thioxo-2',3'-dihydro-3H-[2,5']bithiazolylden-4'-one 562825-45-0P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)phenyl]acetamide 562825-46-1P, 2'-[5-Acetyl-2-(ethylamino)phenyl]imino]-3'-benzyl-3-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolylden-4'-one 562825-48-3P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-(ethylamino)benzonitrile 562825-49-4P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)phenyl]acetamide 562825-50-7P, N-[4-(3'-Benzyl-3-methyl-4'-oxo-[2,5']bithiazolidinyliden-2'-ylideneamino)phenyl]acetamide 562825-53-0P, 3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolylden-2'-ylideneamino)-4-(ethylamino)benzonitrile 562825-54-1P, 3-[[3-Benzyl-5-[3-methyl-5-(trifluoromethyl)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-56-3P, Dimethylcarbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562825-58-5P, 3-[[3-Benzyl-5-[3-methyl-5-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-59-6P, 3-[[3-Benzyl-5-(1,3-dimethyl-1,3-dihydrobenzimidazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile 562825-60-9P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(quinolin-8-ylimino)thiazolidin-4-one 562825-61-0P, 3-Benzyl-2-[(8-hydroxyquinolin-5-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-62-1P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-butylaminobenzonitrile 562825-63-2P, 4-Benzylamino-3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-64-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyclopentylaminobenzonitrile 562825-65-4P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-ylamino)benzonitrile 562825-66-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-(pyrrolidin-1-yl)benzonitrile 562825-67-6P,

3-Benzyl-2-(isoquinolin-5-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-68-7P, 3-Benzyl-2-(isoquinolin-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-69-8P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]aminophenyl]acetamide 562825-70-1P, 2-[(4-Acetylphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-71-2P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzamide 562825-72-3P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(naphthalen-2-ylimino)thiazolidin-4-one 562825-73-4P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-(pyridin-2-ylimino)thiazolidin-4-one 562825-74-5P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamide 562825-75-6P, N-Acetyl-4-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzenesulfonamide 562825-77-8P, 2-[(3-Acetylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-78-9P, N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]pyridin-2-yl]acetamide 562825-79-0P, N-[5-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562825-80-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-81-4P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-ylidene]amino]benzonitrile 562825-82-5P, 4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562825-83-6P, 2-[(5-Acetyl-2-methylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-84-7P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2,2,2-trifluoroacetamide 562825-85-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid methyl ester 562825-86-9P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-phenethylthiazolidin-2-ylidene]amino]benzonitrile 562825-87-0P, 2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzoic acid 562825-90-5P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzoic acid 562825-91-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2-hydroxyethyl)amino]benzonitrile 562825-92-7P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyanophenyl]amino]acetic acid methyl ester 562825-93-8P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-ethyl-4-ethylaminobenzamide 562825-94-9P, [[2-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-cyanophenyl]amino]acetic acid 562825-96-1P, 3-Benzyl-2-[[4-(ethylamino)pyridin-3-yl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562825-97-2P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-3-ethylaminophenyl]acetamide 562825-98-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-[(2-dimethylamino)ethyl]amino]benzonitrile 562826-00-0P, 4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-ethyl-3-ethylaminobenzamide 562826-03-3P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-N-[2-(dimethylamino)ethyl]-4-ethylaminobenzamide 562826-06-6P, 3-Benzyl-2-[[5-(4,5-dihydrooxazol-2-

yl)-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-07-7P, 3-[3-Benzyl-5-(1-methyl-1H-quinolin-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobazonitrile 562826-08-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(1-methyl-1H-quinolin-2-ylidene)thiazolidin-4-one 562826-10-2P, 2-[(3-Acetylphenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-11-3P, N-[4-[[3-Furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-12-4P, [2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]acetic acid methyl ester 562826-13-5P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-2-cyanophenyl]acetamide 562826-14-6P, 2-[(5-Acetyl-2-ethoxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-15-7P, 2-[(5-Acetyl-2-hydroxyphenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-18-0P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-1-methyl-5-(3-methyl-3H-benzothiazol-2-ylidene)imidazolidin-4-one 562826-19-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-[2-(morpholin-4-yl)ethyl]-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-20-4P, 4-Ethylamino-3-[[3-(4-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-22-6P, 4-Ethylamino-3-[[3-(2-methoxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-24-8P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]succinic acid 562826-25-9P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]benzenesulfonamide 562826-26-0P, Thiophene-2-sulfonic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]amide 562826-27-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-3-methoxybenzamide 562826-28-2P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-29-3P, [3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-30-6P, 3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-1,1-dimethylurea 562826-31-7P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-32-8P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(morpholin-4-yl)acetamide 562826-33-9P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-34-0P, [4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]carbamic acid ethyl ester 562826-35-1P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-(dimethylamino)acetamide 562826-36-2P, N-[4-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]methanesulfonamide 562826-37-3P, 4-Ethylamino-3-[[3-(3-hydroxybenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-39-5P, 4-Ethylamino-3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]acetanilide 562826-40-8P, 4-Ethylamino-3-[[3-(3-fluorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]benzonitrile 562826-41-9P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(3-

trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile
562826-42-0P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-(2-trifluoromethylbenzyl)thiazolidin-2-ylidene]amino]benzonitrile
562826-43-1P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-3-(3-methylbenzyl)-4-oxothiazolidin-2-ylidene]amino]benzonitrile
562826-45-3P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(morpholin-4-yl)acetamide 562826-46-4P, 3-[[3-(3-Chlorobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-47-5P, 3-[[3-(3-Bromobenzyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562826-51-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-53-3P, 4-Methylpiperazine-1-carboxylic acid N-[3-[[3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]amide 562826-54-4P, 2-[(5-Amino-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-55-5P
N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(4-methylpiperazin-1-yl)acetamide
562826-57-7P, N-[3-[[3-Benzyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-59-9P, N-[3-[[3-Benzyl-5-(5-hydroxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-67-9P, N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-69-1P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-70-4P, N-[3-[[3-Benzyl-5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-71-5P, N-[3-[[3-Benzyl-5-[5-(2-hydroxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-73-7P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-74-8P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-75-9P, N-[3-[[3-Benzyl-5-[5-(2-chloroethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-76-0P, N-[4-Ethylamino-3-[[3-furan-2-ylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-78-2P, N-[3-[[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-79-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-81-7P, N-[3-[[5-[2-(Dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-3-(furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-84-0P, N-[3-[[3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-hydroxyacetamide 562826-85-1P, N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-

hydroxyacetamide 562826-86-2P, 2-[(3-Acetylphenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one
562826-87-3P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one
562826-89-5P, N-[4-Ethylamino-3-[(3-furan-2-ylmethyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-90-8P,
2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]thiazolidin-4-one 562826-91-9P,
N-[3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]amino]-4-ethylaminophenyl]-2-methoxyacetamide 562826-93-1P, N-[3-[[5-[5-(2-Aminoethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-96-4P,
2-(Dimethylamino)-N-[3-[[3-furan-2-ylmethyl-5-(5-methoxy-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide
562826-97-5P, 3-(3'-Benzyl-3,4,5-trimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562826-98-6P, 3-[[3-Benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
562826-99-7P, 3-(3'-Benzyl-4-ethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-00-3P, 3-[3'-Benzyl-3-methyl-4-(4-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-01-4P, 3-[3'-Benzyl-4-(4-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-02-5P, 3-[3'-Benzyl-4-(4-chlorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-03-6P, 3-(3'-Benzyl-3-methyl-4'-oxo-4-p-tolyl-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-04-7P, 3-[3'-Benzyl-4-(4-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-05-8P, 3-(5-Acetyl-3'-benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-06-9P, 3-[[3-Benzyl-5-(3-methyl-3,4,5,6-tetrahydrocyclopentathiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
562827-07-0P, 3-(3'-Benzyl-3-methyl-4'-oxo-4,5-diphenyl-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-08-1P, 3-(3'-Benzyl-3,4-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino)-4-ethylaminobenzonitrile
562827-09-2P, 4-Ethylamino-3-[[5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoate
562827-13-8P, Methyl 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoic acid
562827-14-9P, 4-[[2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoic acid
562827-18-3P, 3-[[2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-3-yl]methyl]benzoic acid
562827-19-4P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-benzyl-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)thiazolidin-4-one
562827-20-7P, 3-[3'-Benzyl-4-(biphenyl-4-yl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile
562827-21-8P, 3-[3'-Benzyl-3-methyl-4-(naphthalen-2-yl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyldien-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-22-9P,
3-[3'-Benzyl-4-(4-bromophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-

[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile
 562827-23-0P, 3-[3'-Benzyl-3-methyl-4-(2-nitrophenyl)-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-24-1P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-5-(3-methyl-4,5,6,7-tetrahydro-3H-benzothiazol-2-ylidene)-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562827-27-4P,
 3-[3'-Benzyl-4-(3-fluorophenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile
 562827-28-5P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-29-6P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(4-trifluoromethoxyphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-30-9P,
 3-[3'-Benzyl-4-(2,4-dimethoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile
 562827-31-0P, 3-(3'-Benzyl-5-ethyl-3-methyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile
 562827-32-1P, 3-[3'-Benzyl-3-methyl-4'-oxo-4-(2-trifluoromethylphenyl)-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-33-2P, 3-[3'-Benzyl-4-(3-bromophenyl)-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-34-3P, 3-[3'-Benzyl-4-(3-methoxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-35-4P, 3-Benzyl-2-[[4-(1,1,1,3,3,3-hexafluoro-2-hydroxyisopropyl)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-36-5P, 3-(3'-Benzyl-4-chloromethyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-38-7P, 3-(4,3'-Dibenzyl-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile 562827-39-8P, 3'-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-3-methyl-4'-oxo-3',4'-dihydro-3H,2'H-[2,5']bithiazolylidene-4-carboxylic acid 562827-40-1P,
 3-Benzyl-2-[[2-ethylamino-5-(1-hydroxyethyl)phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-41-2P,
 3-[3'-Benzyl-4-(2-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile
 562827-42-3P, 3-Benzyl-2-[[2-ethylamino-5-[1-(hydroxyimino)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-43-4P, 3-Benzyl-2-[[2-ethylamino-5-[1-(methoxyimino)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-44-5P, 3-Benzyl-2-[[5-[1-[(benzyloxy)imino]ethyl]-2-ethylaminophenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-45-6P,
 3-Benzyl-2-[[2-ethylamino-5-[1-(phenylhydrazone)ethyl]phenyl]imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-46-7P,
 3-(4,3'-Dibenzyl-3,5-dimethyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile
 562827-47-8P, 3-[[3-Cyclohexylmethyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile
 562827-48-9P, 3-[3'-Benzyl-4-(3-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-49-0P, 3-[3'-Benzyl-4-(4-hydroxyphenyl)-3-methyl-4'-oxo-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino]-4-ethylaminobenzonitrile 562827-50-3P, 3-(3'-Benzyl-3,4-dimethyl-4'-oxo-5-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminobenzonitrile

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones

and other heterocyclic modulators of nuclear receptors with therapeutic uses)

- IT 562827-51-4P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,5-dimethyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one
 562827-52-5P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3,4-dimethyl-5-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one
 562827-53-6P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(4-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one
 562827-54-7P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-4,3'-dibenzyl-3-methyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-55-8P,
 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(2-methoxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-56-9P,
 3-[[3-Benzyl-5-[5-[2-(dimethylamino)acetyl]-1-methyl-4,5,6,7-tetrahydro-1H-thiazolo[5,4-c]pyridin-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-58-1P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-4-(3-hydroxyphenyl)-3,5-dimethyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-59-2P,
 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3,3'-dibenzyl-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-60-5P,
 N-[3-[[3-Benzyl-5-[5-(2-acetoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-61-6P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-methoxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-63-8P,
 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(3-methoxypropyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one
 562827-67-2P, [2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-5-methyl-4'-oxo-4-phenyl-3',4'-dihydro-2'H-[2,5']bithiazolyliden-3-yl]acetic acid
 562827-71-8P, 2'-(5-Acetyl-2-ethylaminophenyl)imino]-3'-benzyl-3-(2-hydroxyethyl)-5-methyl-4-phenyl-2',3'-dihydro-3H-[2,5']bithiazolyliden-4'-one 562827-73-0P, N-[3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-methoxyacetamide 562827-74-1P, N-[3-(3'-Benzyl-3,5-dimethyl-4'-oxo-4-phenyl-3',4'-dihydro-3H-[2,5']bithiazolyliden-2'-ylideneamino)-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562827-76-3P,
 3-Allyl-2-[(4-hydroxy-5-isopropyl-2-methylphenyl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-77-4P,
 3-Cyclohexyl-2-[(2-hydroxynaphthalen-1-yl)imino]-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-78-5P,
 3-Allyl-2-(2-hydroxynaphthalen-1-ylimino)-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562827-79-6P, 3-[[3-Benzyl-5-(6-fluoro-3-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-81-0P, 4-Ethylamino-3-[[5-(3-methyl-3H-benzothiazol-2-ylidene)-4-oxo-3-propylthiazolidin-2-ylidene]amino]benzonitrile 562827-82-1P, 3-[[3-Benzyl-5-(3-methyl-6-nitro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-83-2P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]acetamide 562827-85-4P, Ethylcarbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-86-5P,
 [[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid methyl ester 562827-87-6P, 2-[[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetamide 562827-88-7P,
 (2-Chloroethyl)carbamic acid 2-[3-benzyl-2-[(5-cyano-2-

ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-89-8P, 3-[[3-Benzyl-5-[3-methyl-5-(2-methylaminoethoxy)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-90-1P, 3-[[3-Benzyl-5-[5-(3-hydroxypropoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-91-2P, (3-Chloropropyl)carbamic acid 2-[3-benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl ester 562827-92-3P, 3-[[3-Benzyl-5-[3-methyl-5-[2-(piperidin-1-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-94-5P, 3-[[3-Benzyl-5-[5-[2-(dimethylamino)ethoxy]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-95-6P, [[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]oxy]acetic acid 562827-97-8P, 3-[[3-Benzyl-5-[6-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]amino]-4-oxothiazolidin-2-ylidene]amino] 562827-98-9P, 3-[[3-Benzyl-5-[3-methyl-6-[2-(morpholin-4-yl)ethoxy]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562827-99-0P, 3-[[3-Benzyl-5-[5-(2-methoxyethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-00-6P, 3-[[3-Benzyl-5-(3-methyl-4-methoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-01-7P, 3-[[3-Benzyl-5-(3-methyl-4-methyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-02-8P, 3-[[3-Benzyl-5-(3-methyl-4-chloro-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-03-9P, 3-[[3-Benzyl-5-(3-methyl-6-trifluoromethoxy-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-04-0P, 3-[[3-Benzyl-5-(3,5,6-trimethyl-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-05-1P, 3-[[3-Benzyl-5-(3-methyl-5-acetamido-3H-benzothiazol-2-ylidene)-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-09-5P, 3-[[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-1,1-dimethylurea 562828-11-9P, 3-[[5-(5-Amino-3-methyl-3H-benzothiazol-2-ylidene)-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-12-0P, [2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]carbamic acid ethyl ester 562828-13-1P, N-[2-[3-Benzyl-2-[(5-cyano-2-[(ethyl)(2-morpholin-4-ylethyl)amino]phenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]-2,2,2-trifluoroacetamide 562828-15-3P, 3-[[3-Benzyl-5-[3-methyl-6-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-16-4P, 3-[[3-Benzyl-5-[3-methyl-6-[(2-ethylaminobenzonitrile)-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminobenzonitrile 562828-17-5P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-dihydrobenzothiazol-5-yl]-2,2,2-trifluoro-N-[2-ylidene]acetamide 562828-18-6P, 3-[[3-Benzyl-5-[3-methyl-5-[(2-(morpholin-4-yl)ethyl)amino]-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-5-ylidene]amino]-4-ethylaminobenzonitrile 562828-19-7P, N-[2-[3-Benzyl-2-[(5-cyano-2-ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]amino]-4-ethylaminobenzonitrile 562828-20-8P

ylidene]-3-methyl-2,3-dihydrobenzothiazol-6-yl]guanidine 562828-20-0P,
3-[(3-Benzyl-5-[3-methyl-6-[(4-trifluoromethylbenzyl)amino]-3H-
benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-
ethylaminobenzonitrile 562828-21-1P, N-[2-[(3-Benzyl-2-[(5-cyano-2-
ethylaminophenyl)imino]-4-oxothiazolidin-5-ylidene]-3-methyl-2,3-
dihydrobenzothiazol-6-yl]-N-(3-fluoropropyl)-2,2,2-trifluoroacetamide
562828-23-3P, 3-[(3-Benzyl-5-[6-[(3-cyanopropyl)amino]-3-methyl-3H-
benzothiazol-2-ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-
(ethylamino)benzonitrile 562828-24-4P, 3-[(3-Benzyl-5-[6-[(3-
hydroxypropyl)amino]-3-methyl-3H-benzothiazol-2-ylidene]-4-oxothiazolidin-
2-ylidene]amino]-4-(ethylamino)benzonitrile 562828-25-5P,
3-[(3-Benzyl-5-[6-[(2-methoxyethyl)amino]-3-methyl-3H-benzothiazol-2-
ylidene]-4-oxothiazolidin-2-ylidene]amino]-4-(ethylamino)benzonitrile
562828-26-6P, 3-Phenyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-
benzyliminothiazolidin-4-one

(drug candidate; preparation of phenylimino thiazolylidene thiazolidinones
and other heterocyclic modulators of nuclear receptors with therapeutic
uses)

- IT 62-53-3, Aniline, reactions 70-23-5, Ethyl bromopyruvate 75-31-0,
Isopropylamine, reactions 75-64-9, tert-Butylamine, reactions
78-95-5, Chloroacetone 79-44-7, Dimethylcarbamoyl chloride 80-48-8,
Methyl p-toluenesulfonate 91-59-8, 2-Naphthylamine 94-70-2,
o-Phenetidine 95-54-5, 1,2-Phenylenediamine, reactions 96-32-2,
Methyl 2-bromoacetate 98-09-9, Benzenesulfonyl chloride 98-16-8,
3-(Trifluoromethyl)aniline 99-03-6, 3'-Aminoacetophenone 99-09-2,
3-Nitroaniline 99-73-0, 2,4'-Dibromoacetophenone 99-81-0,
2-Bromo-4'-nitroacetophenone 99-92-3, 4'-Aminoacetophenone 99-98-9,
N,N-Dimethyl-1,4-phenylenediamine 100-46-9, Benzylamine, reactions
100-63-0, Phenylhydrazine 102-28-3, 3'-Aminoacetanilide 104-94-9
106-50-3, 1,4-Phenylenediamine, reactions 107-10-8, Propylamine,
reactions 107-11-9, Allylamine 108-00-9, N,N-Dimethylethylenediamine
108-30-5, Succinic anhydride, reactions 108-42-9, 3-Chloroaniline
108-45-2, 1,3-Phenylenediamine, reactions 108-91-8, Cyclohexylamine,
reactions 109-01-3, 1-Methylpiperazine 109-73-9, Butylamine,
reactions 109-85-3, 2-Methoxyethylamine 109-90-0, Ethyl isocyanate
110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions
118-92-3, Anthranilic acid 120-53-6, 6-Ethoxy-2-mercaptopbenzothiazole
122-80-5, 4'-Aminoacetanilide 123-75-1, Pyrrolidine, reactions
134-32-7, 1-Naphthylamine 135-73-9, 2-Bromo-4'-phenylacetophenone
144-80-9 351-28-0, 3'-Fluoroacetanilide 352-91-0,
1-Bromo-3-fluoropropane 364-76-1, 4-Fluoro-3-nitroaniline 383-53-9,
2-Bromo-4'-trifluoromethylacetophenone 402-49-3, 4-
(Trifluoromethyl)benzyl bromide 403-29-2, 2-Bromo-4'-fluoroacetophenone
447-31-4, 2-Chloro-2-phenylacetophenone 453-71-4, 4-Fluoro-3-
nitrobenzoic acid 461-82-5, 4-(Trifluoromethoxy)aniline 462-08-8,
3-Aminopyridine 504-24-5, 4-Aminopyridine 504-29-0, 2-Aminopyridine
534-07-6, 1,3-Dichloroacetone 536-38-9, 2-Bromo-4'-chloroacetophenone
578-66-5, 8-Aminoquinoline 580-15-4, 6-Aminoquinoline 583-39-1,
2-Mercaptobenzimidazole 611-34-7, 5-Aminoquinoline 613-54-7,
2-Bromo-2'-acetonaphthone 615-22-5, 2-(Methylthio)benzothiazole
616-34-2, Glycine methyl ester 619-41-0, 2-Bromo-4'-methylacetophenone
619-45-4, Methyl 4-aminobenzoate 622-78-6, Benzyl isothiocyanate
627-18-9 627-42-9, 2-Chloroethyl methyl ether 635-22-3,
4-Chloro-3-nitroaniline 694-28-0, 2-Chlorocyclopentanone 722-92-9,
4-(1,1,1,3,3-Hexafluoro-2-hydroxyisopropyl)aniline 816-40-0,
1-Bromo-2-butanone 822-87-7, 2-Chlorocyclohexanone 877-35-0,
2-Bromobutyrophenone 937-38-2, 1-Chloro-3-phenylpropan-2-one

1003-03-8, Cyclopentylamine 1009-35-4, 4-Fluoro-3-nitrobenzonitrile
1118-68-9, N,N-Dimethylglycine 1125-60-6, 5-Aminoisoquinoline
1129-28-8, Methyl 3-(bromomethyl)benzoate 1198-27-2, 1-Amino-2-naphthol
hydrochloride 1477-42-5, 2-Amino-4-methylbenzothiazole 1532-84-9,
1-Aminoisoquinoline 1694-29-7, 3-Chloro-2,4-pentanedione 1711-05-3,
3-Methoxybenzoyl chloride 1744-22-5, 2-Amino-6-
(trifluoromethoxy)benzothiazole 1821-39-2, 2-Propylaniline 1943-83-5,
2-Chloroethyl isocyanate 2008-75-5, 1-(2-Chloroethyl)piperidine
hydrochloride 2038-03-1, N-(2-Aminoethyl)morpholine 2103-88-0,
2-Mercapto-4-phenylthiazole 2114-00-3, 2-Bromopropiophenone
2221-00-3, 4-(1H-Imidazol-1-yl)aniline 2237-30-1, 3-Aminobenzonitrile
2257-09-2, Phenethyl isothiocyanate 2365-48-2, Methyl thioglycolate
2382-96-9, 2-Mercaptobenzoxazole 2524-67-6, 4-(Morpholin-4-yl)aniline
2632-13-5, 2-Bromo-4'-methoxyacetophenone 2687-43-6,
O-Benzylhydroxylamine hydrochloride 2740-85-4, 3-
(Trifluoromethyl)benzyl isothiocyanate 2835-68-9, 4-Aminobenzamide
2912-62-1, Chlorophenylacetyl chloride 3544-24-9, 3-Aminobenzamide
3647-69-6, 4-(2-Chloroethyl)morpholine hydrochloride 3694-57-3,
4-Methoxybenzyl isothiocyanate 3694-58-4, 3-Chlorobenzyl isothiocyanate
3696-66-0, 3-Methylbenzyl isothiocyanate 3845-33-8, 3-Bromobenzyl
isothiocyanate 4091-39-8, 3-Chloro-2-butanone 4214-76-0,
2-Amino-5-nitropyridine 4274-38-8, 2-Amino-4-
(trifluoromethyl)benzenethiol hydrochloride 4518-10-9, Methyl
3-aminobenzoate 4650-60-6, 2-Furfuryl isothiocyanate 4800-27-5,
1-Methylquinoline-2-thione 4845-58-3, 2-Mercapto-6-nitrobenzothiazole
5000-65-7, 2-Bromo-3'-methoxyacetophenone 5331-91-9,
5-Chloro-2-mercaptobenzothiazole 5332-06-9, 4-Bromobutyronitrile
5332-73-0, 3-Methoxypropylamine 5464-79-9, 2-Amino-4-
methoxybenzothiazole 5465-65-6, 4'-Chloro-3'-nitroacetophenone
5685-05-2, 2-Mercaptothiazole 6232-11-7, Methyl 4-(aminomethyl)benzoate
hydrochloride 6321-11-5, 4-Aminothymol hydrochloride 6322-56-1
, 4'-Hydroxy-3'-nitroacetophenone 6373-46-2, 4-Benzylloxyaniline
6373-50-8, 4-Cyclohexylaniline 6482-24-2, 2-Bromoethyl methyl ether
6851-99-6, 2-Bromo-2'-nitroacetophenone 7340-70-7, 2-Mercapto-6-
acetamidobenzothiazole 7442-07-1, 6-Amino-2-mercaptobenzothiazole
7648-01-3, N-Ethylrhodanine 10112-15-9, N-Ethyl-2-nitroaniline
10574-69-3, N-Benzylrhodanine 13010-19-0, 3-Chloropropyl isocyanate
13091-23-1, 4-Chloro-3-nitropyridine 13207-66-4, 5-Aminoquinolin-8-ol
13515-93-0, Sarcosine methyl ester hydrochloride 14268-66-7,
3,4-(Methylenedioxy)aniline 16596-41-1, 1-Aminopyrrolidine
16629-19-9, 2-(Thiophene)sulfonyl chloride 17026-81-2,
N-(3-Amino-4-ethoxyphenyl)acetamide 17420-30-3, 5-
Nitroanthranilonitrile 17608-09-2, 2-Methoxybenzyl isothiocyanate
19335-11-6, 5-Aminoindazole 19952-47-7, 2-Amino-4-chlorobenzothiazole
19975-56-5, 2-Methylthio-2-thiazoline 21086-33-9, 2-Bromo-4'-
methoxypropiophenone 21726-71-6, 2-Bromo-3'-methoxypropiophenone
24767-67-7, 3-Chloro-1-phenylbutan-2-one 29927-08-0,
2-Amino-5,6-dimethylbenzothiazole 31949-21-0, 2-Bromo-2'-
methoxyacetophenone 38818-50-7, 4-Chloro-3-nitrobenzoyl chloride
51552-16-0, N,N-Dimethylaminoacetyl chloride 51929-59-0,
2-(Trifluoromethyl)benzyl isothiocyanate 52395-66-1, Cyclohexylmethyl
isothiocyanate 53631-18-8, 2-Bromo-3'-fluoroacetophenone 54109-16-9
55514-14-2, 3-Methyl-2-(methylthio)benzothiazol-3-ium p-toluenesulfonate
55690-60-3, 2-Mercapto-5-methoxybenzothiazole 60965-26-6,
2-Bromo-2',4'-dimethoxyacetophenone 63351-94-0, 3-Fluorobenzyl
isothiocyanate 66668-41-5, N1-Ethyl-4-nitrobenzene-1,2-diamine
75272-77-4, 3-Methoxybenzyl isothiocyanate 76650-08-3,

2,3'-Dibromopropiophenone 80087-71-4, 6-Fluoro-2-mercaptopbenzothiazole
 103962-10-3, 2-Bromo-4'-(trifluoromethoxy)acetophenone 135333-25-4,
 2-Bromo-2'-methoxypropiophenone 143174-02-1, 3-Amino-4-
 (ethylamino)benzonitrile 145013-05-4, N,N'-Di(tert-
 butoxycarbonyl)thiourea 147342-57-2, 3-Picolyl isothiocyanate
 hydrobromide 149789-77-5, Rhodanine-3-acetic acid methyl ester
 157160-99-1, 4-Chloro-3-nitrobenzoic acid tert-butyl ester 157665-51-5,
 3-Fluoro-4-nitrobenzoyl chloride 183251-94-7, 3-Amino-4-
 (dimethylamino)benzonitrile 196394-40-8, 5'-Amino-2'-cyanoacetanilide
 199916-98-8, 3-Methyl-2-methylthio-4,5,6,7-tetrahydrobenzothiazol-3-ium
 p-toluenesulfonate 355022-20-7, 3-Amino-4-(isopropylamino)benzonitrile
 448948-73-0, Methyl 3-(isothiocyanatomethyl)benzoate 562825-47-2,
 3'-Amino-4'-(ethylamino)acetophenone 562826-09-9, 2-[(5-Acetyl-2-
 ethylaminophenyl)imino]-3-benzylthiazolidin-4-one 562826-58-8,
 3'-Amino-2-(dimethylamino)-4'-ethylaminoacetanilide 562826-77-1,
 3'-Amino-4'-ethylamino-2-methoxyacetanilide 562826-88-4,
 5-(2-Methoxyethoxy)-2-(methylthio)benzothiazole 562827-10-5,
 4-Ethylamino-3-[(4-oxo-3-(pyridin-3-ylmethyl)thiazolidin-2-
 ylidene)amino]benzonitrile 562827-16-1, 3-Bromo-4-oxopiperidine-1-
 carboxylic acid 9H-fluoren-9-ylmethyl ester 562827-25-2,
 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-[(pyridin-3-
 yl)methyl]thiazolidin-4-one

(preparation of phenylimino thiazolylidene thiazolidinones and other
 heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 345-30-2P, 3'-Fluoro-4'-nitroacetanilide 2788-74-1P,
 4-Ethylamino-3-nitrobenzoic acid 3048-46-2P, 4-Methoxybenzothiazole
 3235-69-6P, Morpholin-4-ylacetic acid 3507-36-6P, 4-Methoxy-2-
 methylthiobenzothiazole 4773-35-7P, 1-Chloro-1-phenylpropan-2-one
 5093-64-1P, N-(5-Nitropyridin-2-yl)acetamide 5540-60-3P,
 N-(4-Chloro-3-nitrophenyl)acetamide 6322-59-4P, 3-Cyclohexylrhodanine
 23420-87-3P, 2-Mercapto-5-(trifluoromethyl)benzothiazole 23838-73-5P,
 N-Ethyl-1,2-phenylenediamine 24430-26-0P, 4'-Ethoxy-3'-
 nitroacetophenone 35009-16-6P, Methyl 4-(isothiocyanatomethyl)benzoate
 36894-61-8P, 5-Acetamidobenzothiazole 41270-42-2P, Triethylammonium
 benzylidithiocarbamate 41504-13-6P, 3-Ethyl-5-(3-methyl-3H-benzothiazol-
 2-ylidene)-2-thioxothiazolidin-4-one 55514-13-1P, 1-Methyl-2-
 methylthioquinolinium p-toluenesulfonate 56813-48-0P,
 5-Amino-2-methylthiobenzothiazole 58759-62-9P, 5-Acetamido-2-
 mercaptobenzothiazole 60853-81-8P, N,N-Dimethylaminoacetyl chloride
 hydrochloride 63224-35-1P, N-(2-Isothiocyanatoethyl)morpholine
 64910-45-8P, 4-Methylamino-3-nitrobenzonitrile 64910-46-9P,
 3-Amino-4-(methylamino)benzonitrile 73894-38-9P, 2-Cyano-4-
 nitroacetanilide 76209-01-3P, 4'-Mercapto-3'-nitroacetanilide
 77008-07-2P, 3,5-Dimethyl-4-phenyl-3H-thiazole-2-thione 79610-23-4P,
 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-thioxothiazolidin-4-one
 90607-40-2P, 4-Ethylamino-3-nitroaniline 90895-33-3P,
 3-Benzyl-5-(3-methyl-3H-benzoxazol-2-ylidene)-2-thioxothiazolidin-4-one
 99987-79-8P, N-Ethyl-4-ethylamino-3-nitrobenzamide 105550-72-9P,
 Triethylammonium N-(2-hydroxyethyl)dithiocarbamate 108018-02-6P,
 3'-Amino-4'-mercaptopacetanilide 108859-12-7P, 3-Ethyl-5-(3-methyl-3H-
 benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium
 p-toluenesulfonate 116091-85-1P, 4-Chloro-N-(2-hydroxyethyl)-3-
 nitrobenzamide 167982-24-3P, Morpholin-4-ylacetyl chloride
 hydrochloride 180863-54-1P, Methyl 3-(azidomethyl)benzoate
 202279-85-4P, 3'-Ethylamino-4'-nitroacetanilide 294193-71-8P,
 2-(Dimethylamino)-3'-nitroacetanilide 339556-33-1P,
 2-Methylthio-6-(trifluoroacetamido)benzothiazole 380330-17-6P,

1-Butyl-3-(3-cyanophenyl)thiourea 396652-42-9P, 4-Ethylamino-3-nitrobenzoic acid methyl ester 562824-99-1P, 3-Benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate 562825-39-2P, 3-[(3-Butyl-4-oxothiazolidin-2-ylidene)amino]benzonitrile 562825-51-8P, 1-Benzyl-3-(5-cyano-2-ethylaminophenyl)thiourea 562825-52-9P, 3-[(3-Benzyl-4-oxothiazolidin-2-ylidene)amino]-4-(ethylamino)benzonitrile 562825-76-7P, 2-[(3-Acetylphenyl)imino]-3-(pyridin-3-ylmethyl)thiazolidin-4-one 562825-88-1P, 4-Ethylamino-3-nitrobenzoic acid tert-butyl ester 562825-95-0P, 4-Ethylamino-3-nitropyridine 562825-99-4P, N-Ethyl-3-ethylamino-4-nitrobenzamide 562826-01-1P, 4-Chloro-N-[2-(dimethylamino)ethyl]-3-nitrobenzamide 562826-02-2P, N-[2-(Dimethylamino)ethyl]-4-ethylamino-3-nitrobenzamide 562826-04-4P, 4-(4,5-Dihydrooxazol-2-yl)-N1-ethylbenzene-1,2-diamine 562826-05-5P, (Ethyl)[4-(4,5-Dihydrooxazol-2-yl)-2-nitrophenyl]amine 562826-16-8P, 3-Benzyl-1-methyl-2-thioxoimidazolidin-4-one 562826-23-7P, 2-[(3-Aminophenyl)imino]-3-benzyl-5-(3-methyl-3H-benzothiazol-2-ylidene)thiazolidin-4-one 562826-38-4P, 4'-Ethylamino-3'-nitroacetanilide 562826-44-2P, 4'-Ethylamino-2-(morpholin-4-yl)-3'-nitroacetanilide 562826-48-6P, 4'-Ethylamino-3'-nitro-2,2,2-trifluoroacetanilide 562826-50-0P, 2-(Dimethylamino)-4'-ethylamino-3'-nitroacetanilide 562826-52-2P, 4-Methylpiperazine-1-carboxylic acid N-(4-ethylamino-3-nitrophenyl)amide 562826-56-6P, 4'-Ethylamino-2-(4-methylpiperazin-1-yl)-3'-nitroacetanilide 562826-60-2P, 5-(2-Chloroethoxy)-2-methylthiobenzothiazole 562826-61-3P, 5-Hydroxy-2-methylthiobenzothiazole 562826-63-5P, 3-Benzyl-5-[5-(2-chloroethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate 562826-66-8P, 3-Benzyl-5-[5-(2-methoxyethoxy)-3-methylbenzothiazol-2-ylidene]-2-methylthio-4-oxo-2-thiazolium p-toluenesulfonate 562826-68-0P, 4'-Ethylamino-2-methoxy-3'-nitroacetanilide 562826-72-6P, 2-[(5-Acetyl-2-ethylaminophenyl)imino]-3-(furan-2-ylmethyl)thiazolidin-4-one 562826-80-6P, N-[4-Ethylamino-3-[(3-furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]phenyl]-2-methoxyacetamide 562826-82-8P, 2-Acetoxy-4'-ethylamino-3'-nitroacetanilide 562826-92-0P, N-[3-[[5-[5-(2-Azidoethoxy)-3-methyl-3H-benzothiazol-2-ylidene]-3-benzyl-4-oxothiazolidin-2-ylidene]amino]-4-ethylaminophenyl]-2-(dimethylamino)acetamide 562826-94-2P, 2-(Dimethylamino)-N-[3-[(3-furan-2-ylmethyl)-4-oxothiazolidin-2-ylidene]amino]phenyl]acetamide 562826-95-3P, 3'-Amino-2-(dimethylamino)acetanilide 562827-11-6P, Methyl 4-[[2-[(5-acetyl-2-ethylaminophenyl)imino]-4-oxothiazolidin-3-yl]methyl]benzoate 562827-62-7P, Triethylammonium N-(2-methoxyethyl)dithiocarbamate 562827-64-9P, Triethylammonium N-(3-methoxypropyl)dithiocarbamate 562827-66-1P, Triethylammonium N-[(methoxycarbonyl)methyl]dithiocarbamate 562827-68-3P, 2-(5-Methyl-4-phenyl-2-thioxo-2,3-dihydrothiazol-3-yl)ethyl acetate 562827-69-4P, 3-(2-Hydroxyethyl)-5-methyl-4-phenyl-3H-thiazole-2-thione 562827-72-9P, 3'-Benzyl-3,5-dimethyl-4-phenyl-2'-thioxo-2',3'-dihydro-3H-[2,5']bithiazolylidene-4'-one 562828-10-8P, 2-Methylthio-5-(2,2,2-trifluoroacetamido)benzothiazole
(preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT

566213-02-3, 1: PN: WO03060078 SEQID: 1 unclaimed DNA 566213-04-5, 3: PN: WO03060078 SEQID: 3 unclaimed DNA 566213-06-7, 5: PN: WO03060078 SEQID: 5 unclaimed DNA 566213-08-9, 7: PN: WO03060078 SEQID: 7 unclaimed DNA 566213-10-3, 9: PN: WO03060078 SEQID: 9 unclaimed DNA 566213-12-5 566213-14-7 566213-16-9 566213-18-1
(unclaimed nucleotide sequence; preparation of phenylimino thiazolylidene

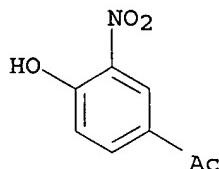
thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 566213-03-4 566213-05-6 566213-07-8 566213-09-0 566213-11-4
 566213-13-6 566213-15-8 566213-17-0 566213-19-2
 (unclaimed protein sequence; preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

IT 6322-56-1, 4'-Hydroxy-3'-nitroacetophenone
 (preparation of phenylimino thiazolylidene thiazolidinones and other heterocyclic modulators of nuclear receptors with therapeutic uses)

RN 6322-56-1 USPATFULL

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 31 OF 101 USPATFULL on STN

DUPLICATE 4

ACCESSION NUMBER:

2003:24202 USPATFULL

TITLE:

Heterocyclic beta-3 adrenergic receptor agonists

INVENTOR(S):

Ashwell, Mark Anthony, Plainsboro, NJ, UNITED STATES

Solvibile, William Ronald, East Windsor, NJ, UNITED STATES

Quagliato, Dominick Anthony, Bridgewater, NJ, UNITED STATES

Molinari, Albert John, Princeton, NJ, UNITED STATES

PATENT ASSIGNEE(S): Wyeth, Madison, NJ, UNITED STATES, 07940 (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION:

US 2003018045 A1 20030123

US 6605618 B2 20030812

APPLICATION INFO.:

US 2002-189312 A1 20020702 (10) <--

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-903841, filed on 12 Jul 2001, GRANTED, Pat. No. US 6451814

	NUMBER	DATE
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PRIORITY INFORMATION:

US 2000-218628P 20000717 (60) <--

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

WYETH, PATENT LAW GROUP, FIVE GIRALDA FARMS, MADISON, NJ, 07940

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1

LINE COUNT: 8768

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides compounds of Formula I having the structure
 ##STR1##

wherein, ##STR2##

, U, V, W, X, and Y are as defined hereinbefore,

or a pharmaceutically acceptable salt thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenetic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes.

INCL	INCLM: 514/312.000 INCLS: 514/317.000; 514/321.000; 514/322.000; 546/158.000; 546/197.000; 546/208.000; 546/205.000; 546/199.000
NCL	NCLM: 514/313.000; 514/312.000 NCLS: 514/312.000; 514/317.000; 514/324.000; 514/321.000; 514/322.000; 546/158.000; 546/197.000; 546/199.000; 546/205.000; 546/208.000
IC	[7] ICM A61K031-4709 ICS A61K031-454; C07D417-02; C07D413-02; C07D043-02 IPCI A61K0031-4709 [ICM,7]; A61K0031-454 [ICS,7]; A61K0031-4523 [ICS,7,C*]; C07D0417-02 [ICS,7]; C07D0417-00 [ICS,7,C*]; C07D0413-02 [ICS,7]; C07D0413-00 [ICS,7,C*]; C07D0043-02 [ICS,7] IPCI-2 A61K0031-47 [ICM,7]; A61K0031-445 [ICS,7] IPCR C07D0211-00 [I,C*]; C07D0211-46 [I,A]; C07D0211-54 [I,A]; C07D0211-58 [I,A]; C07D0211-60 [I,A]; C07D0211-62 [I,A]; C07D0211-96 [I,A]; C07D0401-00 [I,C*]; C07D0401-06 [I,A]; C07D0401-12 [I,A]; C07D0409-00 [I,C*]; C07D0409-06 [I,A]; C07D0409-14 [I,A]; C07D0417-00 [I,C*]; C07D0417-04 [I,A]; C07D0417-12 [I,A]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 136:134675 * WO	0206229	A2 20020124
* CA Indexing for this record included			
CC	27-16 (Heterocyclic Compounds (One Hetero Atom)) Section cross-reference(s): 1, 18, 63		
ST	heterocyclic beta 3 adrenergic receptor agonist prepn activity use; diabetes drug heterocyclic beta 3 adrenergic receptor agonist; atherosclerosis drug heterocyclic beta 3 adrenergic receptor agonist; gastrointestinal disorder drug heterocyclic beta 3 adrenergic receptor agonist; neurogenic inflammation drug heterocyclic beta 3 adrenergic receptor agonist; glaucoma drug heterocyclic beta 3 adrenergic receptor agonist; ocular hypertension drug heterocyclic beta 3 adrenergic receptor agonist; frequent urination drug heterocyclic beta 3 adrenergic receptor agonist; lean meat enhancer heterocyclic beta 3 adrenergic receptor agonist; amino alc urea heterocyclic beta3 adrenergic receptor agonist prepn		
IT	Alcohols, preparation (amino; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)		
IT	Antiarteriosclerotics (antiatherosclerotics; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)		
IT	Drug delivery systems		

(for heterocyclic amino alc. beta-3 adrenergic receptor agonists)

- IT Drugs
 - (gastrointestinal; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Bladder
 - (incontinence; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for treatment or inhibition of)
- IT Anti-inflammatory agents
 - (neurogenic; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Human
 - (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT Heterocyclic compounds
 - (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT Antiglaucoma agents
 - (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Feed additives
 - (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for increasing lean meat to fat ratio)
- IT Adipose tissue
 - Growth, animal
 - Meat
 - (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for increasing lean meat to fat ratio in mammals)
- IT Antidiabetic agents
 - (type II; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Adrenoceptor agonists
 - (β_3 ; preparation of heterocyclic amino alcs. useful as)
- IT 392621-79-3P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide monohydrochloride 392630-65-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid ethyl ester 392632-75-6P, 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid ethyl ester 392633-88-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(8-hydroxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yloxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392637-18-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392637-65-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2-fluoro-4-hydroxybenzylamide 392641-25-7P, 4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]benzoic acid monohydrochloride 392643-18-4P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[2-[4-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide monohydrochloride 392643-58-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzyl ester
 - (intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT 312-32-3P, 1-[(4-Fluorophenyl)sulfonyl]piperidine 403-14-5P, 1-(3-Fluoro-4-hydroxyphenyl)-1-ethanone 463-16-1P, 9-Fluorononanoic acid 1142-07-0P, N-Hexyl-N'-phenylurea 1522-00-5P, N,N-Diethylsuccinamic acid 3383-72-0P, 1-(2-Chloroethoxy)-4-

nitrobenzene 3510-68-7P 18436-62-9P, 1-(2,2-Dimethoxyethyl)-4-nitrobenzene 19786-48-2P, Methyl 2-(4-nitrophenoxy)acetate
 21572-58-7P, N-Ethyl-N'-(4-hydroxyphenyl)urea 25437-95-0P, Ethyl 4-(4-oxo-1-piperidinyl)benzoate 29650-44-0P, 2-Fluorophenyl acetate
 34583-53-4P, N-Octyl-N'-phenylurea 34957-73-8P, Methyl 9-hydroxynonanoate 51767-39-6P, N-(4-Hydroxyphenyl)methanesulfonamide
 59430-56-7P, 5,8-Dihydroxy-3,4-dihydro-2(1H)-quinolinone 59826-16-3P,
 8-(Benzylxy)-5-hydroxy-3,4-dihydro-2(1H)-quinolinone 59954-04-0P,
 Methyl 2-(4-aminophenoxy)acetate 60814-16-6P, 2-(4-Nitrophenoxy)-1-ethanamine 64318-28-1P, tert-Butyl 4-hydroxyphenethylcarbamate
 72370-19-5P, 2-(Benzylxy)-5-(2-bromoacetyl)benzamide 79421-38-8P,
 Ethyl 4-(1,4-dioxa-8-azaspiro[4.5]dec-8-yl)benzoate 81840-59-7P,
 (2S)-2-[(2-Allylphenoxy)methyl]oxirane 94838-59-2P,
 [2-(4-Aminophenyl)ethyl]carbamic acid tert-butyl ester 104605-98-3P,
 (2S)-2-[(4-Fluorophenoxy)methyl]oxirane 108534-48-1P,
 (4-tert-Butyldiphenylsilyloxy)phenol 122797-04-0P, (2S)-2-[(4-Benzylxyphenoxy)methyl]oxirane 132059-11-1P, 2-Nitro-6-[(2S)-oxiranylmethoxy]aniline 144226-16-4P, N-(tert-Butoxycarbonyl)-4-nitrophenethylamine 150125-47-6P, 2-(Benzylxy)-5-(2-oxiranyl)benzamide 157187-49-0P, N-[4-(Benzylxy)phenyl]methanesulfonamide 159184-13-1P,
 1-(2-Azidoethoxy)-4-nitrobenzene 159184-14-2P, tert-Butyl 2-(4-nitrophenoxy)ethylcarbamate 159184-15-3P, tert-Butyl 2-(4-aminophenoxy)ethylcarbamate 173901-02-5P,
 4-[(Hexylamino)carbonyl]amino]benzenesulfonyl chloride 197248-09-2P,
 3-[(tert-Butyldiphenylsilyl)oxy]phenol 197774-51-9P,
 4-[(2S)-Oxiranylmethoxy]-1,3-dihydro-2H-benzimidazol-2-one 199461-14-8P, N-(4-Fluorophenyl)succinamic acid 211917-94-1P,
 N-[3-(Benzylxy)phenyl]methanesulfonamide 211917-95-2P, tert-Butyl 3-(benzylxy)phenyl(methylsulfonyl)carbamate 211917-96-3P, tert-Butyl 3-hydroxyphenyl(methylsulfonyl)carbamate 211917-97-4P, tert-Butyl methylsulfonyl[3-[(2S)-oxiranylmethoxy]phenyl]carbamate 329977-83-5P,
 5-[(2S)-Oxiranylmethoxy]-1,3-benzodioxole 373359-46-7P,
 8-(Benzylxy)-5-[(2S)-oxiranylmethoxy]-3,4-dihydro-2(1H)-quinolinone 391671-77-5P, S-[4-[2-[(tert-Butoxycarbonyl)amino]ethyl]phenyl] O-ethyl carbonodithioate 391671-97-9P, Triisopropyl[2-methyl-4-((2S)-oxiranylmethoxy)phenoxy]silane 391674-00-3P, tert-Butyl(4-oxiranylmethoxyphenoxy)diphenylsilane 391674-01-4P,
 (4-Benzylxyphenoxy)tert-butyldiphenylsilane 391935-15-2P,
 8-[4-(1-Piperidinylsulfonyl)phenyl]-1,4-dioxa-8-azaspiro[4.5]decane 391935-91-4P, 1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinone 392619-82-8P, Methyl 2-hydroxy-5-[(2S)-(oxiranyl)methoxy]benzoate 392620-18-7P, 2-(Benzylxy)-5-(2-bromo-1-hydroxyethyl)benzamide 392620-22-3P, N-Ethyl-N'-[4-((2S)-oxiranylmethoxy)phenyl]urea 392620-27-8P, N-[4-(Benzylxy)phenyl]-N'-ethylurea 392620-41-6P,
 N-[4-((2S)-Oxiranylmethoxy)phenyl]methanesulfonamide 392620-53-0P, tert-Butyl 2-[(tert-butyldiphenylsilyl)oxy]-5-[(2S)-oxiranylmethoxy]phenyl(methylsulfonyl)carbamate 392620-57-4P,
 4-(tert-Butyldiphenylsilyloxy)-3-nitroacetophenone 392620-63-2P, Acetic acid 3-nitro-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-67-6P,
 Acetic acid 3-amino-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-72-3P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-[(methylsulfonyl)amino]phenyl acetate 392620-76-7P,
 3-[(tert-Butoxycarbonyl)(methylsulfonyl)amino]-4-[(tert-butyldiphenylsilyl)oxy]phenyl acetate 392620-81-4P, tert-Butyl 2-[(tert-butyldiphenylsilyl)oxy]-5-hydroxyphenyl(methylsulfonyl)carbamate 392620-88-1P, N-[3-((2S)-Oxiranylmethoxy)phenyl]acetamide 392621-01-1P,
 tert-Butyl[2-fluoro-4-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane

392621-05-5P, 1-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl]-1-ethanone 392621-09-9P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl acetate 392621-13-5P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenol 392621-17-9P, 5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone O-[(2S)-oxiranylmethyl]oxime 392621-20-4P, 5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone 392621-24-8P, 5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone oxime 392621-47-5P, tert-Butyl[3-[(2S)-oxiranylmethoxy]phenoxy]diphenylsilane 392621-50-0P, 2-[(E)-2-(4-Nitrophenyl)diazetyl]-5-[(2S)-oxiranylmethoxy]pyridine 392621-53-3P, 6-[(E)-2-(4-Nitrophenyl)diazetyl]-3-pyridinol 392621-56-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorobenzaldehyde 392621-60-2P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenyl formate 392621-64-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenol 392621-68-0P, tert-Butyl(diphenyl)silyl 3-chloro-4-[(2S)-oxiranylmethoxy]phenyl ether 392621-86-2P, tert-Butyl 4-[(1-benzyl-4-piperidinyl)amino]phenethylcarbamate 392621-90-8P, [2-[4-(Piperidin-4-ylamino)phenyl]ethyl]carbamic acid tert-butyl ester 392621-94-2P, tert-Butyl 4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392621-98-6P, 4-[4-(2-Aminoethyl)anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide formate 392622-02-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392622-08-1P, tert-Butyl 4-[[1-(cyclohexylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392622-13-8P, 4-[4-(2-Aminoethyl)anilino]-N-cyclohexyl-1-piperidinecarboxamide formate 392622-17-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-cyclohexyl-1-piperidinecarboxamide 392622-25-2P, [2-[4-[1-(Octylcarbamoyl)piperidin-4-ylaminophenyl]ethyl]carbamic acid tert-butyl ester 392622-29-6P, 4-[4-(2-Aminoethyl)anilino]-N-octyl-1-piperidinecarboxamide formate 392622-43-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-[(2-[(E)-2-(4-nitrophenyl)diazetyl]-4-pyridinyl)oxy]propyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-54-7P, tert-Butyl 4-[[1-[(3-methoxyphenethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392622-59-2P, 4-[4-(2-Aminoethyl)anilino]-N-(3-methoxyphenethyl)-1-piperidinecarboxamide formate 392622-63-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-methoxyphenethyl)-1-piperidinecarboxamide 392622-69-4P, 4-[4-[2-[(2-[(3-(Aminocarbonyl)-4-(benzyloxy)phenyl]-2-hydroxyethyl)amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-77-4P, tert-Butyl 4-[acetyl(1-benzyl-4-piperidinyl)amino]phenethylcarbamate 392622-82-1P, tert-Butyl 4-[acetyl(4-piperidinyl)amino]phenethylcarbamate 392622-86-5P, tert-Butyl 4-[acetyl[1-[(octylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392622-90-1P, 4-[4-[2-[(2S)-3-[4-(Benzyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-97-8P, tert-Butyl 4-[[1-(methylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-02-8P, 4-[N-Acetyl-4-(2-aminoethyl)anilino]-N-octyl-1-piperidinecarboxamide formate 392623-07-3P, 4-[4-(2-Aminoethyl)anilino]-N-methyl-1-piperidinecarboxamide formate 392623-10-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-methyl-1-piperidinecarboxamide 392623-29-9P, tert-Butyl 4-[[1-[(ethylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-33-5P, 4-[4-(2-

Aminoethyl)anilino]-N-ethyl-1-piperidinecarboxamide 392623-37-9P,
4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-
hydroxypropyl]amino]ethyl]anilino]-N-ethyl-1-piperidinecarboxamide
392623-50-6P, tert-Butyl 4-[[1-[(isopropylamino)carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392623-55-1P, 4-[4-(2-
Aminoethyl)anilino]-N-isopropyl-1-piperidinecarboxamide formate
392623-59-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethyl]anilino]-N-isopropyl-1-piperidinecarboxamide
392623-67-5P, tert-Butyl 4-[[1-[(3-cyclopentylpropyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392623-71-1P, 4-[4-(2-
Aminoethyl)anilino]-N-(3-cyclopentylpropyl)-1-piperidinecarboxamide
formate 392623-76-6P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-
cyclopentylpropyl)-1-piperidinecarboxamide formate 392623-84-6P,
tert-Butyl 4-[[1-[(2,2,2-trifluoroethyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392623-89-1P, 4-[4-(2-
Aminoethyl)anilino]-N-(2,2,2-trifluoroethyl)-1-piperidinecarboxamide
formate 392623-93-7P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
(2,2,2-trifluoroethyl)-1-piperidinecarboxamide 392624-01-0P, tert-Butyl
4-[[1-[(diethylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate
392624-05-4P, 4-[4-(2-Aminoethyl)anilino]-N,N-diethyl-1-
piperidinecarboxamide 392624-09-8P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N,N-
diethyl-1-piperidinecarboxamide 392624-14-5P, 4-[4-(2-
Aminoethyl)anilino]-N,N-diethyl-1-piperidinecarboxamide formate
392624-21-4P, tert-Butyl 4-[[1-[(4-fluorophenethyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392624-26-9P, 4-[4-(2-
Aminoethyl)anilino]-N-(4-fluorophenethyl)-1-piperidinecarboxamide formate
392624-30-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethyl]anilino]-N-(4-fluorophenethyl)-1-
piperidinecarboxamide 392624-36-1P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]-2-chlorophenoxy]-2-hydroxypropyl]amino]ethyl]anil-
ino]-N-octyl-1-piperidinecarboxamide 392624-44-1P, tert-Butyl
4-[[1-[[4-[3-(cyclopentyloxy)-4-methoxyphenyl]-1-piperidinyl]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392624-49-6P, [4-[4-(2-
Aminoethyl)anilino]-1-piperidinyl][4-[3-(cyclopentyloxy)-4-methoxyphenyl]-
1-piperidinyl]methanone formate 392624-53-2P, [4-[4-[2-[(2S)-3-[4-
[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilin-
o]-1-piperidinyl][4-[3-(cyclopentyloxy)-4-methoxyphenyl]-1-
piperidinyl]methanone 392624-61-2P, tert-Butyl 4-[[1-[(1,1,3,3-
tetramethylbutyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate
392624-65-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxamide
392624-76-9P, tert-Butyl 4-[[1-[(2,4-dichlorobenzyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392624-81-6P, 4-[4-(2-
Aminoethyl)anilino]-N-(2,4-dichlorobenzyl)-1-piperidinecarboxamide
formate 392624-85-0P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
(2,4-dichlorobenzyl)-1-piperidinecarboxamide 392624-93-0P, tert-Butyl
4-[[1-[[3,4-dichlorobenzyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392624-99-6P, 4-[4-(2-
Aminoethyl)anilino]-N-(3,4-dichlorobenzyl)-1-piperidinecarboxamide
formate 392625-02-4P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
(2,3-dichlorobenzyl)-1-piperidinecarboxamide 392625-17-1P, tert-Butyl
4-[[1-[[3-(2-thienyl)propyl]amino]carbonyl]-4-

piperidinyl]amino]phenethylcarbamate 392625-23-9P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(2-thienyl)propyl]-1-piperidinecarboxamide
 formate 392625-28-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(2-thienyl)propyl]-1-piperidinecarboxamide 392625-37-5P, tert-Butyl
 4-[[1-[(3,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392625-42-2P, 4-[4-(2-Aminoethyl)anilino]-N-(3,5-difluorobenzyl)-1-piperidinecarboxamide
 formate 392625-46-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3,5-difluorobenzyl)-1-piperidinecarboxamide 392625-63-7P, tert-Butyl
 4-[[1-[(2,3-dimethoxybenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392625-68-2P, 4-[4-(2-Aminoethyl)anilino]-N-(2,3-dimethoxybenzyl)-1-piperidinecarboxamide
 formate 392625-72-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,3-dimethoxybenzyl)-1-piperidinecarboxamide 392625-83-1P, tert-Butyl
 4-[[1-[(2-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392625-88-6P, 4-[4-(2-Aminoethyl)anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide 392625-89-7P, 4-[4-(2-Aminoethyl)anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide formate 392625-93-3P, tert-Butyl
 4-[[1-[(2-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate formate 392625-97-7P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide 392626-08-3P, tert-Butyl
 4-[[1-[(3-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-13-0P, 4-[4-(2-Aminoethyl)anilino]-N-(3-fluorobenzyl)-1-piperidinecarboxamide formate 392626-17-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-fluorobenzyl)-1-piperidinecarboxamide 392626-24-3P, tert-Butyl
 4-[[1-[[3-(4-methylphenyl)-3-oxopropyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-28-7P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide 392626-29-8P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide formate 392626-33-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide 392626-44-7P, tert-Butyl 4-[[1-[[3-(4-methylphenyl)propyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-49-2P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)propyl]-1-piperidinecarboxamide formate 392626-53-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-methylphenyl)propyl]-1-piperidinecarboxamide 392626-61-8P, tert-Butyl 4-[[1-[(4-ethylphenethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-68-5P, 4-[4-(2-Aminoethyl)anilino]-N-(4-ethylphenethyl)-1-piperidinecarboxamide formate 392626-71-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(4-ethylphenethyl)-1-piperidinecarboxamide 392626-78-7P, tert-Butyl
 4-[[1-[(2,2-diphenylethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-83-4P, 4-[4-(2-Aminoethyl)anilino]-N-(2,2-diphenylethyl)-1-piperidinecarboxamide formate 392626-87-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,2-diphenylethyl)-1-piperidinecarboxamide 392626-93-6P, tert-Butyl 4-[[1-[(2,6-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392626-99-2P, 4-[4-(2-Aminoethyl)anilino]-N-(2,6-difluorobenzyl)-1-

piperidinecarboxamide formate 392627-02-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,6-difluorobenzyl)-1-piperidinecarboxamide 392627-10-0P, tert-Butyl 4-[[1-[[2-(trifluoromethyl)benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-15-5P, 4-[4-(2-Aminoethyl)anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide formate 392627-19-9P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide 392627-20-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide formate 392627-30-4P, 4-(1H-Pyrazol-1-yl)-2-(trifluoromethyl)benzonitrile 392627-34-8P, 4-(1H-Pyrazol-1-yl)-2-(trifluoromethyl)benzylamine 392627-39-3P, tert-Butyl 4-[[1-[[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-44-0P, 4-[4-(2-Aminoethyl)anilino]-N-[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide formate 392627-49-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide 392627-57-5P, tert-Butyl 4-[[1-[(isopentylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-62-2P, 4-[4-(2-Aminoethyl)anilino]-N-isopentyl-1-piperidinecarboxamide formate 392627-67-7P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-isopentyl-1-piperidinecarboxamide 392627-86-0P, tert-Butyl 4-[[1-[(2,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-90-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide 392627-95-1P, 4-[4-(2-Aminoethyl)anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide formate 392628-03-4P, Methyl 5-[(2S)-3-[[4-[[1-[(2,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethyl]amino]-2-hydroxypropyl]oxy]-2-hydroxybenzoate 392628-14-7P, tert-Butyl 2-[4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenoxy]ethylcarbamate 392628-18-1P, tert-Butyl 2-[4-(4-piperidinylamino)phenoxy]ethylcarbamate 392628-22-7P, 4-[4-(2-Aminoethoxy)anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392628-26-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethoxy]anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392628-39-6P, 4-Hydroxy-N-phenyl-1-piperidinecarboxamide 392628-44-3P, 4-Bromo-N-phenyl-1-piperidinecarboxamide 392628-48-7P, tert-Butyl 4-[[1-(anilinocarbonyl)-4-piperidinyl]sulfanyl]phenethylcarbamate 392628-53-4P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-phenyl-1-piperidinecarboxamide 392628-57-8P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-phenyl-1-piperidinecarboxamide 392628-69-2P, N-Hexyl-4-hydroxy-1-piperidinecarboxamide 392628-74-9P, 4-Bromo-N-hexyl-1-piperidinecarboxamide 392628-78-3P, tert-Butyl 4-[[1-(hexylamino)carbonyl]-4-piperidinyl]sulfanyl]phenethylcarbamate 392628-83-0P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-hexyl-1-piperidinecarboxamide 392628-87-4P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-hexyl-1-piperidinecarboxamide 392628-97-6P, N-(4-Fluorobenzyl)-4-hydroxy-1-piperidinecarboxamide 392629-02-6P, 4-Bromo-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392629-07-1P, tert-Butyl 4-[[1-(4-fluorobenzylaminocarbonyl)-4-piperidinyl]sulfanyl]phenethylcarba

mate 392629-11-7P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-(4-fluorobenzylamino)-1-piperidinecarboxamide 392629-15-1P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392629-24-2P, 4-Hydroxy-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392629-29-7P, 4-Bromo-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392629-33-3P, tert-Butyl 4-[[1-[[[(1-phenylcyclopentyl)methyl]amino]carbo]nyl]-4-piperidinyl]sulfanyl]phenethylcarbamate 392629-38-8P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392629-42-4P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392629-50-4P, tert-Butyl 4-[[1-[(hexylamino)carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392629-55-9P, [4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-1-piperidinyl](3-methyl-2-thienyl)methanone 392629-60-6P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-hexyl-1-piperidinecarboxamide 392629-75-3P, tert-Butyl 4-[[1-(4-fluorobenzylaminocarbonyl)-4-piperidinyl]sulfonyl]phenethylcarbamate 392629-80-0P, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-(4-fluorobenzylamino)-1-piperidinecarboxamide 392629-85-5P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392629-94-6P, tert-Butyl 4-[[1-[[[(1-phenylcyclopentyl)methyl]amino]carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392629-99-1P, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392630-05-6P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392630-16-9P, 4-Hydroxy-N-octyl-1-piperidinecarboxamide 392630-21-6P, 4-Bromo-N-octyl-1-piperidinecarboxamide 392630-26-1P, tert-Butyl 4-[[1-[(octylamino)carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392630-30-7P, tert-Butyl 4-[[1-[(octylamino)carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392630-35-2P, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-octyl-1-piperidinecarboxamide 392630-39-6P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-octyl-1-piperidinecarboxamide 392630-48-7P, 4-[[4-[2-[(2S)-2-Hydroxy-3-[3-methyl-4-[(triisopropylsilyl)oxy]phenoxy]propyl]amino]ethyl]phenyl]sulfanyl]-N-octyl-1-piperidinecarboxamide 392630-61-4P, tert-Butyl 2-[(tert-butyldiphenylsilyl)oxy]-5-[[[(2S)-3-[4-[[1-[(2,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethyl]amino]-2-hydroxypropyl]oxy]phenyl(methylsulfonyl)carbamate 392630-73-8P, 4-(2,2-Dimethoxyethyl)aniline 392630-77-2P, 1-Benzyl-N-[4-(2,2-dimethoxyethyl)phenyl]-4-piperidinamine 392630-81-8P, N-[4-(2,2-Dimethoxyethyl)phenyl]-N-(4-piperidinyl)amine 392630-85-2P, 1-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylcarbonyl)piperidine-4-carboxylic acid ethyl ester 392630-89-6P, Ethyl 1-[(4-oxo-1-piperidinyl)carbonyl]-4-piperidinecarboxylate 392630-94-3P, 4-[[1-[[4-[4-(2,2-Dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]]piperidinecarboxylic acid ethyl ester 392631-11-7P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392631-24-2P, tert-Butyl 4-[[1-[(octylamino)carbonyl]-4-piperidinyl]oxy]phenethylcarbamate 392631-28-6P, 4-[[4-(2-Aminoethyl)phenoxy]-N-octyl-1-piperidinecarboxamide

392631-33-3P, 4-[4-[2-[(2S)-3-[4-(Benzylxyloxy)phenoxy]-2-hydroxypropyl]amino]ethyl]phenoxy]-N-octyl-1-piperidinecarboxamide
 392631-46-8P, Methyl 9-fluorononanoate 392631-51-5P, tert-Butyl 4-[[1-[(8-fluoroctyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392631-60-6P, 4-[4-(2-Aminoethyl)anilino]-N-(8-fluoroctyl)-1-piperidinecarboxamide 392631-65-1P, 4-[4-[2-[(2S)-3-[4-(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(8-fluoroctyl)-1-piperidinecarboxamide
 (intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392631-75-3P, tert-Butyl 4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]oxy]phenethylcarbamate 392631-80-0P, 4-[4-(2-Aminoethyl)phenoxy]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392631-84-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenoxy]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392632-03-0P, tert-Butyl 4-[[1-[[4-(3,4-dimethoxyphenyl)butyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392632-11-0P, 4-[4-(2-Aminoethyl)anilino]-N-[4-(3,4-dimethoxyphenyl)butyl]-1-piperidinecarboxamide 392632-16-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[4-(3,4-dimethoxyphenyl)butyl]-1-piperidinecarboxamide 392632-31-4P, Methyl 2-[4-[[4-[4-[2-[(tert-butoxycarbonyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-37-0P, Methyl 2-[4-[[4-[4-(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate formate 392632-41-6P, Methyl 2-[4-[[4-[4-[2-[(2S)-2-hydroxy-3-[4-[(isopropylidiphenylsilyl)oxy]phenoxy]propyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-45-0P, Methyl 2-[4-[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-54-1P, 4-[4-[2-[(2R)-2-[4-(Benzylxyloxy)-3-[(methylsulfonyl)amino]phenyl]-2-[(triethylsilyl)oxy]ethyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392632-62-1P, 4-[4-[2-[(2R)-2-(4-Benzylxyloxy)-3-methanesulfonylaminophenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392632-79-0P, Ethyl 1-[[4-[4-[2-[(tert-butoxycarbonyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate 392632-85-8P, Ethyl 1-[[4-[4-(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate formate 392632-91-6P, Ethyl 1-[4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate 392633-10-2P, 4-[4-[2-[(2S)-3-[[5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenylidene]amino]oxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392633-18-0P, N-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]-N'-octylurea 392633-27-1P, 4-[4-[2-[(2S)-3-[4-(Benzylxyloxy)-3-[(methylsulfonyl)amino]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392633-38-4P, 2-[4-[(Hexylamino)carbonyl]amino]phenyl]acetic acid 392633-46-4P, tert-Butyl 4-[[1-[[4-[(hexylamino)carbonyl]amino]benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392633-52-2P, 4-[4-(2-Aminoethyl)anilino]-N-[[4-[(hexylamino)carbonyl]amino]benzyl]-1-piperidinecarboxamide formate 392633-55-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[[4-[(hexylamino)carbonyl]amino]benzyl]-1-piperidinecarboxamide 392633-64-6P, tert-Butyl 4-[[1-[(3-cyclohexylpropyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392633-74-8P, 4-[4-(2-

Aminoethyl)anilino]-N-(3-cyclohexylpropyl)-1-piperidinecarboxamide
formate 392633-79-3P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-
cyclohexylpropyl)-1-piperidinecarboxamide 392633-84-0P, tert-Butyl
4-[[1-[(3-cyclohexylpropyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate formate 392633-92-0P,
4-[4-[2-[(2S)-3-[8-(Benzyl)oxy]-2-oxo-1,2,3,4-tetrahydro-5-
quinolinyl]oxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-
piperidinecarboxamide 392634-00-3P, tert-Butyl 4-[[1-
[(cyclopentylmethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate
392634-05-8P, 4-[4-(2-Aminoethyl)anilino]-N-(cyclopentylmethyl)-1-
piperidinecarboxamide formate 392634-10-5P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
(cyclopentylmethyl)-1-piperidinecarboxamide 392634-18-3P, tert-Butyl
4-[[1-[[2-methoxy-4-(3-phenoxypropoxy)phenethyl]amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392634-27-4P, 4-[4-(2-
Aminoethyl)anilino]-N-[2-methoxy-4-(3-phenoxypropoxy)phenethyl]-1-
piperidinecarboxamide formate 392634-31-0P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-
methoxy-4-(3-phenoxypropoxy)phenethyl]-1-piperidinecarboxamide
392634-50-3P, tert-Butyl 2-[4-[(1-benzyl-4-piperidinyl)amino]phenoxy]ethylcarbamate
392634-55-8P, tert-Butyl 2-[4-[[1-[(octylamino)carbonyl]-4-
piperidinyl]amino]phenoxy]ethylcarbamate 392634-61-6P,
4-[4-(2-Aminoethoxy)anilino]-N-octyl-1-piperidinecarboxamide formate
392634-67-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethoxy]anilino]-N-octyl-1-piperidinecarboxamide
392634-74-1P, Methyl 3-[4-[(dimethylamino)carbonyl]oxy]phenylpropanoate
392634-78-5P, 3-[4-[(Dimethylamino)carbonyl]oxy]phenylpropanoic acid
392634-82-1P, 4-[2-[[4-[4-[2-[(tert-Butoxycarbonyl)amino]ethyl]anilino]-
1-piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate
392634-86-5P, 4-[2-[[4-[4-(2-Aminoethyl)anilino]-1-
piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate formate
392634-90-1P, 4-[2-[[4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-
piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate 392635-03-9P,
N-(2,5-Difluorobenzyl)-4-[4-(2,2-dimethoxyethyl)anilino]-1-
piperidinecarboxamide 392635-17-5P, Methyl (2S)-1-(1,4-dioxa-8-
azaspiro[4.5]dec-8-ylcarbonyl)-2-pyrrolidinecarboxylate 392635-25-5P,
Methyl (2S)-1-[(4-oxo-1-piperidinyl)carbonyl]-2-pyrrolidinecarboxylate
392635-30-2P, Methyl (2S)-1-[[4-[4-(2,2-dimethoxyethyl)anilino]-1-
piperidinyl]carbonyl]-2-pyrrolidinecarboxylate 392635-40-4P, Ethyl
1-(1,4-dioxa-8-azaspiro[4.5]dec-8-ylcarbonyl)-3-piperidinecarboxylate
392635-44-8P, Ethyl 1-[(4-oxo-1-piperidinyl)carbonyl]-3-
piperidinecarboxylate 392635-49-3P, Ethyl 1-[[4-[4-(2,2-
dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]-3-piperidinecarboxylate
392635-58-4P, tert-Butyl 4-[[1-[(3-methoxybenzyl)amino]carbonyl]-4-
piperidinyl]amino]phenethylcarbamate 392635-63-1P, 4-[4-(2-
Aminoethyl)anilino]-N-(3-methoxybenzyl)-1-piperidinecarboxamide
392635-67-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethyl]anilino]-N-(3-methoxybenzyl)-1-
piperidinecarboxamide 392635-75-5P, tert-Butyl 4-[[1-[(2,4-
difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate
392636-00-9P, 4-[4-(2-Aminoethyl)anilino]-N-(2,4-difluorobenzyl)-1-
piperidinecarboxamide formate 392636-05-4P, 4-[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
(2,4-difluorobenzyl)-1-piperidinecarboxamide 392636-17-8P,
[2-[4-[1-[(2-[(4-Fluorophenylcarbamoyl)ethyl]carbamoyl)piperidin-4-

ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-23-6P,
 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-fluoroanilino)-3-oxopropyl]-1-piperidinecarboxamide formate 392636-27-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-fluoroanilino)-3-oxopropyl]-1-piperidinecarboxamide 392636-35-0P,
 N-(4-Chlorophenyl)-N-methylsuccinamic acid 392636-41-8P,
 [2-[4-[1-[2-[(4-Chlorophenyl)methylcarbamoyl]ethylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-48-5P,
 4-[4-(2-Aminoethyl)anilino]-N-[3-[4-chloro(methyl)anilino]-3-oxopropyl]-1-piperidinecarboxamide formate 392636-52-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-[4-chloro(methyl)anilino]-3-oxopropyl]-1-piperidinecarboxamide 392636-61-2P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzonitrile 392636-65-6P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylamine 392636-69-0P, [2-[4-[1-[4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-73-6P, N-[4-[(tert-Butyldiphenylsilyl)oxy]-2-fluorobenzyl]-4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392636-87-2P, [4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzyl]carbamic acid tert-butyl ester 392636-92-9P, (2-Fluoro-4-hydroxybenzyl)carbamic acid tert-butyl ester 392636-96-3P, tert-Butyl 4-[[[1-(dimethylamino)vinyl]oxy]methyl]-2-fluorobenzylcarbamate 392637-02-4P, 1-[4-(Aminomethyl)-3-fluorobenzyl]oxy]-N,N-dimethyl-1-ethylenamine formate 392637-06-8P, [2-[4-[1-(4-Dimethylcarbamoyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392637-11-5P, 4-[[[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenyl dimethylcarbamate formate 392637-15-9P, 4-[[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenyl dimethylcarbamate 392637-21-7P, N-(4-Fluorobenzyl)-4-[4-[2-[(2S)-2-hydroxy-3-[3-((isopropyldiphenylsilyl)oxy)phenoxy]propyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392637-33-1P, [4-(tert-Butoxycarbonylaminomethyl)-3-fluorophenoxy]acetic acid methyl ester 392637-38-6P, Methyl 2-[4-(aminomethyl)-3-fluorophenoxy]acetate 392637-43-3P, 4-[[4-[4-(2-tert-Butoxycarbonylaminooethyl)phenylamino]piperidine-1-carbonyl]amino]-3-fluorophenoxyacetic acid methyl ester 392637-51-3P, Methyl 2-[4-[[4-[4-(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenoxy]acetate 392637-57-9P, Methyl 2-[4-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenoxy]acetate 392637-61-5P, Methyl 2-[3-fluoro-4-[[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]phenoxylacetate 392637-70-6P, N-[4-[(tert-Butyldiphenylsilyl)oxy]benzyl]-4-[4-[2-[(2S)-2-hydroxy-3-[3-((isopropyldiphenylsilyl)oxy)phenoxy]propyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392637-87-5P, tert-Butyl 4-[[1-[[3-fluorophenethyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392637-91-1P, 4-[4-(2-Aminoethyl)anilino]-N-(3-fluorophenethyl)-1-piperidinecarboxamide 392637-95-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-fluorophenethyl)-1-piperidinecarboxamide 392638-03-8P, [2-[4-[1-(2-Diethylcarbamoylethylcarbamoyl)piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392638-09-4P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(dimethylamino)-3-oxopropyl]-1-

piperidinecarboxamide formate 392638-13-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(dimethylamino)-3-oxopropyl]-1-piperidinecarboxamide 392638-24-3P
 392638-29-8P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-morpholinyl)-3-oxopropyl]-1-piperidinecarboxamide formate 392638-36-7P,
 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-morpholinyl)-3-oxopropyl]-1-piperidinecarboxamide 392638-45-8P, tert-Butyl 4-[[1-(1H-indol-2-ylcarbonyl)-4-piperidinyl]amino]phenethylcarbamate 392638-52-7P,
 [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-2-yl)methanone formate 392638-56-1P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](1H-indol-2-yl)methanone 392638-69-6P, Ethyl 1-[(Octylamino)carbonyl]-4-piperidinecarboxylate 392638-74-3P,
 1-[(Octylamino)carbonyl]-4-piperidinecarboxylic acid 392638-79-8P, tert-Butyl 4-[[1-[(1-[(Octylamino)carbonyl]-4-piperidinyl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392638-86-7P, 4-[[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]-N-octyl-1-piperidinecarboxamide formate 392638-91-4P, 4-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]-N-octyl-1-piperidinecarboxamide
 392639-03-1P, tert-Butyl 4-[[1-[4-[(hexylamino)carbonyl]amino]benzoyl]-4-piperidinyl]amino]phenethylcarbamate 392639-11-1P, N-[4-[[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]phenyl]-N'-hexylurea
 392639-17-7P, N-[4-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]phenyl]-N'-hexylurea 392639-27-9P, tert-Butyl 4-[[1-[(5-methoxy-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-32-6P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](5-methoxy-1H-indol-2-yl)methanone formate 392639-36-0P,
 [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](5-methoxy-1H-indol-2-yl)methanone 392639-45-1P, tert-Butyl 4-[[1-[(7-nitro-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-53-1P,
 [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone 392639-58-6P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone 392639-63-3P,
 [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone formate 392639-71-3P, tert-Butyl 4-[[1-[(5-bromo-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-76-8P,
 [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](5-bromo-1H-indol-2-yl)methanone 392639-80-4P, (5-Bromo-1H-indol-2-yl)[4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]methanone 392639-90-6P, tert-Butyl 4-[[1-[(3-methoxy-1-benzothiophen-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-99-5P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](3-methoxy-1-benzothiophen-2-yl)methanone 392640-04-9P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](3-methoxy-1-benzothiophen-2-yl)methanone 392640-19-6P,
 tert-Butyl 4-[[1-(1H-indol-3-ylcarbonyl)-4-piperidinyl]amino]phenethylcarbamate 392640-23-2P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-3-yl)methanone 392640-27-6P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](1H-indol-3-yl)methanone 392640-35-6P, tert-Butyl 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate

te 392640-40-3P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](3-methyl-2-thienyl)methanone 392640-46-9P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](3-methyl-2-thienyl)methanone 392640-59-4P, tert-Butyl 4-[[1-(1H-indazol-3-ylcarbonyl)-4-piperidinyl]amino]phenethylcarbamate 392640-63-0P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indazol-3-yl)methanone 392640-68-5P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](1H-indazol-3-yl)methanone 392640-78-7P, tert-Butyl 4-[(1-hexanoyl-4-piperidinyl)amino]phenethylcarbamate 392640-84-5P, 1-[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]-1-hexanone formate 392640-89-0P, 1-[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]-1-hexanone 392640-96-9P, tert-Butyl (2S)-1-[(4-fluorophenyl)sulfonyl]-2-pyrrolidinecarboxylate 392641-04-2P, tert-Butyl 4-[[1-[(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392641-12-2P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl][(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone formate 392641-17-7P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl] (2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone formate 392641-30-4P, Methyl 4-[[4-[4-(2,2-dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]benzoate 392641-35-9P, Methyl 4-[[4-[4-[2-[(2R)-2-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]benzoate 392641-46-2P, (4-Hydroxy-1-piperidinyl)(3-methyl-2-thienyl)methanone 392641-50-8P, (4-Bromo-1-piperidinyl)(3-methyl-2-thienyl)methanone 392641-55-3P, tert-Butyl 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]sulfanyl]phenethylcarbamate 392641-59-7P, [4-[(4-(2-Aminoethyl)phenyl)sulfanyl]-1-piperidinyl](3-methyl-2-thienyl)methanone 392641-64-4P, [4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-1-piperidinyl](3-methyl-2-thienyl)methanone 392641-73-5P, tert-Butyl 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392641-77-9P, [4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-1-piperidinyl](3-methyl-2-thienyl)methanone 392641-86-0P, tert-Butyl 4-[[1-[(4-[(hexylamino)carbonyl]amino)phenyl]sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392641-91-7P, N-[4-[[4-(2-Aminoethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-hexylurea formate 392641-95-1P, N-[4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-hexylurea 392642-09-0P, tert-Butyl 4-[[1-(octylsulfonyl)-4-piperidinyl]amino]phenethylcarbamate 392642-12-5P, N-[4-(2-Aminoethyl)phenyl]-1-(octylsulfonyl)-4-piperidinamine 392642-16-9P, (2S)-1-[[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-(octylsulfonyl)-4-piperidinyl]amino]phenethyl]amino]-2-propanol 392642-24-9P, tert-Butyl 4-[[1-[(4-methylphenyl)sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-28-3P, N-[4-(2-Aminoethyl)phenyl]-1-[(4-methylphenyl)sulfonyl]-4-piperidinamine 392642-32-9P, (2S)-1-[[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-(4-methylphenyl)sulfonyl]-4-piperidinyl]amino]phenethyl]amino]-2-propanol 392642-40-9P, tert-Butyl 4-[[1-[(1-methyl-1H-imidazol-4-yl)sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-44-3P, (2S)-1-[[4-[(tert-

Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-[(1-methyl-1H-imidazol-4-yl)sulfonyl]-4-piperidinyl]amino]phenethyl]amino]-2-propanol
 392642-52-3P, tert-Butyl 4-[[1-[[4-(acetylamino)phenyl]sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-56-7P, N-[4-[[4-[(2-Aminoethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]acetamide
 392642-60-3P, N-[4-[[4-[[2-[(2S)-3-[(4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl]acetamide 392642-67-0P,
 N-[5-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylsulfonyl)-4-methyl-1,3-thiazol-2-yl]acetamide 392642-71-6P, N-[4-Methyl-5-[(4-oxo-1-piperidinyl)sulfonyl]-1,3-thiazol-2-yl]acetamide 392642-75-0P,
 N-[5-[[4-[(4-(2,2-Dimethoxyethyl)anilino)-1-piperidinyl]sulfonyl]-4-methyl-1,3-thiazol-2-yl]acetamide 392642-82-9P, 4-
 [[(Octylamino)carbonyl]amino]benzenesulfonyl chloride 392642-86-3P,
 N-[4-[[4-[(2,2-Dimethoxyethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-octylurea 392642-94-3P, N-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylcarbothioyl)benzamide 392642-98-7P, 1,4-Dioxa-8-azaspiro[4.5]decane-8-carbothioamide 392643-02-6P, 1-(4-Phenyl-1,3-thiazol-2-yl)-4-piperidinone 392643-07-1P, tert-Butyl 4-[[1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinyl]amino]phenethylcarbamate formate 392643-14-0P,
 (2S)-1-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinyl]amino]phenethyl]amino]-2-propanol
 392643-23-1P, N-[4-(2,2-Dimethoxyethyl)phenyl]-1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinamine 392643-42-4P, N-[4-(2,2-Dimethoxyethyl)phenyl]-1-[4-(1-piperidinylsulfonyl)phenyl]-4-piperidinamine 392643-54-8P, Ethyl 4-[[4-[(dimethoxymethyl)anilino]-1-piperidinyl]benzoate 392643-63-9P,
 4-Fluorobenzyl 4-[[4-[(tert-butoxycarbonyl)amino]ethyl]anilino]-1-piperidinecarboxylate 392643-73-1P, 4-Fluorobenzyl 4-[4-(2-aminoethyl)anilino]-1-piperidinecarboxylate formate 392643-77-5P,
 4-Fluorobenzyl 4-[[4-[(2S)-3-[(4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxylate
 392643-84-4P, 4-[[4-(2-tert-Butoxycarbonylaminoethyl)phenylamino]piperidin-1-carboxylic acid 2,5-difluorobenzyl ester 392643-91-3P,
 2,5-Difluorobenzyl 4-[[4-(2-aminoethyl)anilino]-1-piperidinecarboxylate formate 392643-94-6P, 2,5-Difluorobenzyl 4-[[4-[(2S)-3-[(4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxylate

(intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392627-99-5P, 5-[[[(2S)-3-[[4-[[1-[(2,5-Difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethyl]amino]-2-hydroxypropyl]oxy]-2-hydroxybenzoic acid

(preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392622-05-8P, 4-[[4-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid cyclohexylamide monohydrochloride 392622-21-8P, 4-[[4-[(2S)-3-(4-Fluorophenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392622-32-1P, 4-[[4-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide dihydrochloride 392622-39-8P, 4-[[4-[(2S)-3-(6-Aminopyridin-3-yloxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride 392622-50-3P, 4-[[4-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(3-methoxyphenyl)ethyl]amide monohydrochloride 392622-66-1P, 4-[[4-[(2S)-3-Carbamoyl-4-hydroxyphenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride 392622-73-0P,

4-[Acetyl[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxyl)propylamino]ethyl]phenyl]amino]piperidine-1-carboxylic acid octylamide monohydrochloride
392622-94-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid methylamide monohydrochloride
392623-14-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid ethylamide monohydrochloride
392623-44-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid isopropylamide
monohydrochloride 392623-63-1P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
(3-cyclopentylpropyl)amide monohydrochloride 392623-79-9P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (2,2,2-trifluoroethyl)amide 392624-18-9P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(4-fluorophenyl)ethyl]amide
392624-33-8P, 4-[4-[2-[(2S)-3-(2-Chloro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide
392624-40-7P, [4-(3-Cyclopentyloxy-4-methoxyphenyl)piperidin-1-yl]-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone 392624-57-6P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
amide 392624-68-9P, 4-[4-[2-[(2S)-3-[4-(3-Ethylureido)phenoxy]-2-hydroxypropyl]amino]ethyl]phenylamino]piperidine-1-carboxylic acid
[2-(4-fluorophenyl)ethyl]amide 392624-72-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic
acid 2,4-dichlorobenzylamide 392624-89-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
3,4-dichlorobenzylamide 392625-07-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-
carboxylic acid octylamide 392625-13-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
(3-thiophen-2-ylpropyl)amide 392625-32-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
3,5-difluorobenzylamide 392625-50-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
2,3-dimethoxybenzylamide 392625-78-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
2-fluorobenzylamide 392626-04-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
3-fluorobenzylamide 392626-20-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
(3-oxo-3-p-tolylpropyl)amide 392626-39-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
(3-p-tolylpropyl)amide 392626-57-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
[2-(4-ethylphenyl)ethyl]amide 392626-75-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic
acid (2,2-diphenylethyl)amide 392626-89-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic
acid 2,6-difluorobenzylamide 392627-06-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
2-trifluoromethylbenzylamide 392627-26-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
4-pyrazol-1-yl-2-trifluoromethylbenzylamide 392627-53-1P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-methylbutyl)amide 392627-71-3P,
4-[4-[2-[(2R)-2-(3-Chlorophenyl)-2-hydroxyethylamino]ethyl]phenylamino]pi

peridine-1-carboxylic acid octylamide monohydrochloride 392627-80-4P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino
l4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethoxy]phenylamin
o4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa
nyllN-Hexyl-4-[[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]
phenyl]sulfanyl]-1-piperidinecarboxamide 392628-92-1P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa
nyll4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa
nyll392629-46-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth
yl]benzenesulfonyl]piperidine-1-carboxylic acid hexylamide
392629-70-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth
yl]benzenesulfonyl]piperidine-1-carboxylic acid 4-fluorobenzylamide
392629-89-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth
yl]benzenesulfonyl]piperidine-1-carboxylic acid ((1-
phenylcyclopentyl)methyl)amide 392630-11-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-
(4-hydroxyphenoxy)propylamino]ethyl]benzenesulfonyl]piperidine-1-
carboxylic acid octylamide 392630-43-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-
hydroxy-3-methylphenoxy)propylamino]ethyl]benzenesulfonyl]piperidine-1-
carboxylic acid octylamide 392630-53-4P, 4-[4-[2-[(2S)-3-
(Benzo[1,3]dioxol-5-yloxy)-2-hydroxypropylamino]ethyl]benzenesulfonyl]pip
eridine-1-carboxylic acid octylamide 392630-57-8P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-methanesulfonylaminophenoxy)propyl
amino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,5-
difluorobenzylamide 392631-04-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-
hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperid
ine-1-carbonyl]piperidine-4-carboxylic acid monohydrochloride
392631-16-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]e
thyl]phenoxy]-N-octyl-1-piperidinecarboxamide monohydrochloride
392631-38-8P, N-(8-Fluoroctyl)-4-[4-[2-[(2S)-2-hydroxy-3-(4-
hydroxyphenoxy)propyl]amino]ethyl]anilino]-1-piperidinecarboxamide
dihydrochloride 392631-70-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-
hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid
4-fluorobenzylamide monohydrochloride 392631-88-8P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]pipe
ridine-1-carboxylic acid [4-(3,4-dimethoxyphenyl)butyl]amide
392632-21-2P, Lithium [4-[4-[4-[2-[(2S)-2-hydroxy-3-(4-
hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-
carbonyl]amino]phenoxyacetate 392632-50-7P, 4-[4-[2-[(2R)-2-Hydroxy-2-
(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]pipe
ridine-1-carboxylic acid octylamide monohydrochloride 392632-66-5P,
4-[4-[2-[(2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzoimidazol-4-
yloxy)propylamino]ethyl]phenylaminol]piperidine-1-carboxylic acid
octylamide 392632-95-0P, Lithium 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-
hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-
carbonyl]piperidine-4-carboxylate 392633-00-0P, 4-[4-[2-[(2S)-3-(3-
Acetylaminophenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-
carboxylic acid octylamide 392633-05-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(5-
hydroxy-3,4-dihydro-1(2H)-naphthalen-1-ylideneaminoxy)propylamino]ethyl]
phenylamino]piperidine-1-carboxylic acid octylamide 392633-14-6P,
4-[4-[2-[(2S)-3-(3-Fluoro-4-hydroxyphenoxy)-2-
hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
octylamide 392633-23-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-

methanesulfonylaminophenoxy)propylaminoethyl]phenylamino)piperidine-1-carboxylic acid octylamide monohydrochloride 392633-34-0P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylaminoethyl]phenylamino)piperidine-1-carboxylic acid 4-(3-hexylureido)benzylamide
392633-60-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylaminoethyl]phenylamino)piperidine-1-carboxylic acid (3-cyclohexylpropyl)amide
392633-96-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylaminoethyl]phenylamino)piperidine-1-carboxylic acid (cyclopentylmethyl)amide
392634-14-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylaminoethyl]phenylamino)piperidine-1-carboxylic acid [2-[2-methoxy-4-(3-phenoxypropoxy)phenyl]ethyl]amide 392634-35-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzoimidazol-4-yloxy)propylamino]ethoxy]phenylamino)piperidine-1-carboxylic acid octylamide 392634-65-0P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethoxy]phenylamino)piperidine-1-carboxylic acid octylamide 392634-70-7P,
Dimethylcarbamic acid 4-[2-[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxyl]amino]ethyl]phenyl ester 392634-94-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid 4-fluorobenzylamide 392634-99-0P,
4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethyl]amino]ethyl]phenylamino)piperidine-1-carboxylic acid 2,5-difluorobenzylamide 392635-13-1P, 1-[[4-[[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl-L-proline methyl ester 392635-35-7P,
1-[[4-[[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl-3-piperidinecarboxylic acid ethyl ester monohydrochloride 392635-53-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid 3-methoxybenzylamide 392635-71-1P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid 2,4-difluorobenzylamide 392636-09-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid [2-(4-fluorophenylcarbamoyl)ethyl]amide 392636-31-6P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid [2-[(4-chlorophenyl)methylcarbamoyl]ethyl]amide 392636-57-6P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid 2-fluoro-4-hydroxybenzylamide 392636-82-7P, Dimethylcarbamic acid 3-fluoro-4-[[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]amino]methyl]phenyl ester 392637-29-5P, [3-Fluoro-4-[[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]amino]methyl]phenoxy]acetic acid lithium salt 392637-82-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid [2-(3-fluorophenyl)ethyl]amide 392637-99-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid (2-diethylcarbamoylethyl)amide 392638-17-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid (3-morpholin-4-yl-3-oxopropyl)amide 392638-40-3P 392638-65-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid octylamide monohydrochloride 392638-96-9P, 1-Hexyl-3-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxyl]phenyl]urea 392639-22-4P, [4-[4-[2-[(2S)-2-hydroxy-3-(4-

hydroxyphenoxy]propylamino]ethyl]phenylamino]piperidin-1-yl] (5-methoxy-1H-indol-2-yl)methanone monohydrochloride 392639-41-7P,
[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl] (7-nitro-1H-indol-2-yl)methanone 392639-67-7P,
(5-Bromo-1H-indol-2-yl) [4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone monohydrochloride 392639-84-8P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl] (3-methoxybenzo[b]thiophen-2-yl)methanone monohydrochloride 392640-09-4P,
N-[3-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methoxybenzo[b]thiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenyl]acetamide monohydrochloride 392640-14-1P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl] (1H-indol-3-yl)methanone 392640-31-2P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl] (3-methylthiophen-2-yl)methanone monohydrochloride 392640-50-5P,
4-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methylthiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]-1,3-dihydrobenzimidazol-2-one monohydrochloride 392640-54-9P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl] (1H-indazol-3-yl)methanone monohydrochloride 392640-73-2P, 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]hexan-1-one 392640-92-5P, [(2S)-1-(4-Fluorobenzenesulfonyl)pyrrolidin-2-yl][4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone 392641-40-6P, [4-[[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]sulfanyl]piperidin-1-yl] (3-methylthiophen-2-yl)methanone 392641-68-8P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]urea monohydrochloride 392641-99-5P,
N-[4-[4-[4-[2-[(2S)-3-(4-Fluorophenoxy)-2-hydroxypropylamino]ethyl]phenyl]amino]piperidine-1-sulfonyl]phenyl]-N'-hexylurea 392642-02-3P,
N-[4-[[4-[4-[2-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-hexylurea 392642-06-7P
392642-20-5P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(toluene-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol monohydrochloride
392642-36-3P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(1-methyl-1H-imidazole-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol
392642-48-7P, N-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]acetamide monohydrochloride 392642-64-7P,
N-[5-[[4-[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)aminophenyl]ethyl]amino]ethyl]anilino]piperidin-1-yl]sulfonyl]-4-methyl-1,3-thiazol-2-yl]acetamide 392642-79-4P,
N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[4-[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide monohydrochloride 392642-90-9P,
4-[(2S)-2-Hydroxy-3-[2-[4-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol 392643-27-5P,
N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[4-[1-[4-(piperidine-1-sulfonyl)phenyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392643-46-8P, 4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidin-1-yl]benzoic acid ethyl ester dihydrochloride 392643-80-0P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,5-difluorobenzyl ester 392644-11-0P,

4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-15-4P
 , 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid octylamide 392644-19-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (8-fluoroethyl)amide 392644-21-2P, [4-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxyl]amino]phenoxy]acetic acid 392644-25-6P, 4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-29-0P,
 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid 392644-33-6P,
 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-[(methylsulfonyl)amino]phenyl)ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]-3-piperidine carboxylic acid ethyl ester 392644-38-1P, [3-Fluoro-4-[[4-[4-[2-[(S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]amino]methyl]phenoxy]acetic acid 392644-52-9P,
 N-Hexyl-N'-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]urea 392644-56-3P,
 1-[4-[4-[4-[2-[3-(2-Allylphenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]-3-hexylurea 392644-64-3P,
 4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidin-1-yl]benzoic acid ethyl ester 392644-69-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392644-73-4P, 4-[4-[2-[(2R)-2-(3-Chlorophenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-77-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid 392644-81-4P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid 4-fluorobenzylamide 392644-85-8P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-88-1P, 4-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-1-carboxylic acid octylamide 392644-92-7P,
 [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](5-methoxy-1H-indol-2-yl)methanone 392644-95-0P,
 (5-Bromo-1H-indol-2-yl)-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone 392644-98-3P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]-[3-methoxybenzo[b]thiophen-2-yl]methanone 392645-01-1P, N-[3-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methoxybenzo[b]thiophene-2-carboxyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenyl]acetamide 392645-06-6P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](3-methylthiophen-2-yl)methanone 392645-10-2P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methylthiophene-2-carboxyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]-1,3-dihydrobenzoimidazol-2-one 392645-15-7P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](1H-indazol-3-yl)methanone 392645-19-1P, 4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]benzoic acid 392645-24-8P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(toluene-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol 392645-27-1P, N-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-

hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-sulfonyl]phenyl]acetamide 392645-31-7P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[4-[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392645-34-0P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[2-[4-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392645-39-5P, 4-[4-[2-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropylamino]ethyl]phenylamino)piperidine-1-carboxylic acid octylamide 392645-44-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid cyclohexylamide 392645-49-7P, 4-[4-[2-[(2S)-3-(6-Aminopyridin-3-yloxy)-2-hydroxypropylamino]ethyl]phenylamino)piperidine-1-carboxylic acid octylamide 392645-53-3P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid [2-(3-methoxyphenyl)ethyl]amide 392645-58-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid octylamide 392645-61-3P, 4-[Acetyl[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenyl]amino)piperidine-1-carboxylic acid octylamide 392645-67-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid methylamide 392645-73-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid isopropylamide 392645-78-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid (3-cyclopentylpropyl)amide 392661-78-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-carboxylic acid diethylamide

(preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT .51-67-2, Tyramine 70-11-1, 2-Bromo-1-phenyl-1-ethanone 89-99-6, 2-Fluorobenzylamine 95-00-1, 2,4-Dichlorobenzylamine 96-32-2, Methyl bromoacetate 100-01-6, 4-Nitroaniline, reactions 100-02-7, 4-Nitrophenol, reactions 100-27-6, 2-(4-Nitrophenyl)-1-ethanol 100-39-0, Benzyl bromide 100-82-3, 3-Fluorobenzylamine 102-49-8, 3,4-Dichlorobenzylamine 103-16-2, 4-Benzylxylophenol 103-71-9, Phenyl isocyanate, reactions 108-46-3, Resorcinol, reactions 109-00-2, 3-Hydroxypyridine 109-90-0, Ethyl isocyanate 110-91-8, Morpholine, reactions 111-26-2, Hexylamine 111-86-4, Octylamine 121-60-8, 4-(Acetylamino)benzenesulfonyl chloride 140-75-0, 4-Fluorobenzylamine 140-89-6, Potassium ethyl xanthate 142-61-0, Hexanoyl chloride 177-11-7, 1,4-Dioxa-8-azaspiro[4.5]decane 288-13-1, Pyrazole 349-88-2, 4-Fluorobenzenesulfonyl chloride 367-12-4, 2-Fluorophenol 371-40-4, 4-Fluoroaniline 371-41-5, 4-Fluorophenol 404-70-6, 3-Fluorophenethylamine 451-46-7, Ethyl 4-fluorobenzoate 459-19-8, 4-Fluorophenethylamine hydrochloride 459-56-3, (4-Fluorophenyl)methanol 532-55-8, Benzoyl isothiocyanate 533-31-3, Sesamol 603-85-0, 2-Amino-3-nitrophenol 606-83-7, 3,3-Diphenylpropionic acid 621-42-1, N-(3-Hydroxyphenyl)acetamide 646-07-1, 4-Methylvaleric acid 753-90-2, 2,2,2-Trifluoroethylamine 771-50-6, 1H-Indole-3-carboxylic acid 932-96-7, N-Methyl-4-chloroaniline 1123-00-8, 2-Cyclopentylacetic acid 1126-09-6, Ethyl isonicotinate 1145-15-9, 5-(3,4-Dimethoxyphenyl)pentanoic acid 1197-55-3, 2-(4-Aminophenyl)acetic acid 1477-50-5, 1H-Indole-2-carboxylic acid 1484-26-0, 3-(Benzylxylo)aniline 1611-57-0, 1,1,3,3-Tetramethylbutyl isocyanate 1679-64-7, 4-(Methoxycarbonyl)benzoic acid 1745-81-9, 2-Allylphenol 1795-48-8, Isopropyl isocyanate 2039-67-0, 3-Methoxyphenethylamine 2104-19-0, 9-Methoxy-9-oxononanoic acid 2150-46-1, Methyl 2,5-dihydroxybenzoate 2525-62-4, Hexyl isocyanate 2577-48-2, Methyl (2S)-2-

pyrrolidinecarboxylate 2812-46-6, tert-Butyl (2S)-2-pyrrolidinecarboxylate 3048-01-9, 2-Trifluoromethylbenzylamine 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate 3612-20-2, 1-Benzyl-4-piperidone 4124-41-8 4382-54-1, 5-Methoxy-1H-indole-2-carboxylic acid 4393-09-3, 2,3-Dimethoxybenzylamine 4441-63-8, 4-Cyclohexylbutanoic acid 4498-67-3, 1H-Indazole-3-carboxylic acid 4521-22-6, 4-(p-Tolyl)butyric acid 4619-20-9, 3-(4-Methylbenzoyl)propionic acid 4653-11-6, 4-(2-Thienyl)butyric acid 5006-62-2, Ethyl 3-piperidinecarboxylate 5071-96-5, 3-Methoxybenzylamine 5382-16-1, 4-Hydroxypiperidine 5597-50-2, Methyl 3-(4-hydroxyphenyl)propanoate 6053-58-3, 3-Cyclopentylpropylamine **6322-56-1**, 4-Hydroxy-3-nitroacetophenone 6373-46-2, 4-(Phenylmethoxy)benzenamine 6960-45-8, 7-Nitro-1H-indole-2-carboxylic acid 7254-19-5, 5-Bromo-1H-indole-2-carboxylic acid 7693-46-1, 4-Nitrophenyl chloroformate 7795-95-1, 1-Octanesulfonyl chloride 13472-00-9, 4-(2-Aminoethyl)aniline 18162-48-6, tert-Butyldimethylchlorosilane 19354-50-8, 3-Methoxybenzo[b]thiophene-2-carboxylic acid 23806-24-8, 3-Methyl-2-thiophenecarboxylic acid 28315-93-7, 5-Hydroxy-3,4-dihydro-1(2H)-naphthalenone 29968-78-3, 4-Nitrophenethylamine hydrochloride 56962-11-9, 2-Chloro-4-hydroxybenzaldehyde 58479-61-1, tert-Butylchlorodiphenylsilane 61306-74-9, 5,8-Dimethoxy-3,4-dihydro-2(1H)-quinolinone 62600-71-9, (2R)-2-(3-Chlorophenyl)oxirane 64740-36-9, 3-(4-Ethylphenyl)propionic acid 69385-30-4, 2,6-Difluorobenzylamine 69812-29-9, 2-Acetamido-4-methyl-5-thiazolesulfonyl chloride 70987-78-9, (S)-(+)-Glycidyl 4-methylbenzenesulfonate 72235-52-0, 2,4-Difluorobenzylamine 75637-30-8, 5-Acetyl-2-(phenylmethoxy)benzamide 75853-20-2, 2,5-Difluorobenzyl alcohol 82380-18-5, 2-Fluoro-4-hydroxybenzonitrile 85118-06-5, 2,5-Difluorobenzylamine 97801-56-4, (2S)-1-[(4-Fluorophenyl)sulfonyl]-2-pyrrolidinecarboxylic acid 105184-38-1, 3,5-Difluorophenylacetic acid 115314-14-2, (2S)-Oxiranylmethyl 3-nitrobenzenesulfonate 132740-43-3, 4-Fluorobenzyl isocyanate 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride 160818-96-2, 4-[3-(Cyclopentyloxy)-4-methoxyphenyl]piperidine 194853-86-6, 4-Fluoro-2-(trifluoromethyl)benzonitrile 246262-20-4, N-[2-(Benzylxy)-5-((2S)-oxiranylmethoxy)phenyl]methanesulfonamide 246262-39-5, N-[2-(Benzylxy)-5-[(1R)-2-iodo-1-[(triethylsilyl)oxy]ethyl]phenyl]methanesulfonamide 340756-75-4, N-[5-((1R)-2-Amino-1-hydroxyethyl)-2-hydroxyphenyl]methanesulfonamide 391671-82-2, tert-Butyl[4-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane 391671-98-0, 4-(Triisopropylsilyloxy)-3-methylphenol 391674-53-6, 4-[(Hexylamino)carbonyl]amino]benzoic acid 392621-97-5, 4-[4-(2-Aminoethyl)phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392622-28-5, 4-[4-(2-Aminoethyl)anilino]-N-octyl-1-piperidinecarboxamide 392622-46-7, 2-[(E)-2-(4-Nitrophenyl)diazenyl]-4-((2S)-oxiranylmethoxy)pyridine 392623-39-1, 4-[4-(2-Aminoethyl)anilino]-N-ethyl-1-piperidinecarboxamide formate 392627-94-0, 4-[4-(2-Aminoethyl)anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide 392629-65-1, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-hexyl-1-piperidinecarboxamide 392634-22-9, 3-[2-Methoxy-4-(3-phenoxypropoxy)phenyl]propanoic acid 392636-78-1 392637-74-0, [2-[4-[1-[4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]amine formate 392638-32-3, [2-[4-[1-(4-Morpholin-4-yl-4-oxobutyryl)piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392638-51-6, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-2-yl)methanone

392641-11-1, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl][(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone

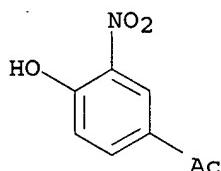
(reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT **6322-56-1**, 4-Hydroxy-3-nitroacetophenone

(reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

RN 6322-56-1 USPATFULL

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 32 OF 101 USPATFULL on STN

DUPLICATE 5

ACCESSION NUMBER:

2002:67254 USPATFULL

TITLE:

Substituted 2- (S) -hydroxy-3- (piperidin-4-yl-methylamino) -propyl ethers and substituted 2-aryl-2- (R) - hydroxy-1- (piperidin-4-yl-methyl) -ethylamine beta-3 adrenergic receptor agonists

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 American Home Products Corporation, Madison, NJ, UNITED STATES, 07054-0874 (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE

PATENT INFORMATION:

US 2002037907 . A1 20020328

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APPLICATION INFO.:

US 6506901 B2 20030114

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US 2001-903738 A1 20010712 (9)

<--

NUMBER DATE

PRIORITY INFORMATION:

US 2000-218753P 20000717 (60)

<--

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

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NUMBER OF CLAIMS:

13

EXEMPLARY CLAIM:

1

LINE COUNT:

8158

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides compounds of Formula I having the structure
 ##STR1##

wherein A, B, Z, R and R.sup.1 are as defined hereinbefore, or a

pharmaceutically acceptable salt thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenetic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes.

INCL INCLM: 514/317.000
 INCLS: 514/320.000; 514/325.000; 546/198.000; 546/203.000; 546/192.000
 NCL NCLM: 546/192.000; 514/317.000
 NCLS: 514/320.000; 514/325.000; 546/198.000; 546/203.000
 IC [7]
 ICM C07D041-02
 ICS C07D211-26; A61K031-454; A61K031-445
 IPCI C07D0041-02 [ICM,7]; C07D0211-26 [ICS,7]; C07D0211-00 [ICS,7,C*];
 A61K0031-454 [ICS,7]; A61K0031-4523 [ICS,7,C*]; A61K0031-445
 [ICS,7]
 IPCI-2 C07D0211-96 [ICM,7]; C07D0211-00 [ICM,7,C*]; A61K0031-445 [ICS,7]
 IPCR A61K0031-445 [I,A]; A61K0031-445 [I,C*]; C07D0211-00 [I,C*];
 C07D0211-96 [I,A]; C07D0401-00 [I,C*]; C07D0401-04 [I,A];
 C07D0401-12 [I,A]; C07D0403-00 [I,C*]; C07D0403-14 [I,A];
 C07D0409-00 [I,C*]; C07D0409-12 [I,A]; C07D0413-00 [I,C*];
 C07D0413-12 [I,A]; C07D0521-00 [I,A]; C07D0521-00 [I,C*]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 136:134677 * WO	0206255	A2 20020124
* CA	Indexing for this record included		
CC	27-16 (Heterocyclic Compounds (One Hetero Atom)) Section cross-reference(s): 1, 18		
ST	piperidine beta 3 adrenergic receptor agonist antidiabetic antiobesity prepn; hydroxyaminopropyl ether hydroxyethylamine combinatorial antiglaucoma antiinflammatory antiobesity feed additive		
IT	Antiarteriosclerotics (antiatherosclerotics; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)		
IT	Digestive tract (disease, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)		
IT	Bladder (incontinence, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)		
IT	Inflammation (neurogenic, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)		
IT	Antihypertensives (ocular; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)		
IT	Anti-inflammatory agents <u>Antidiabetic agents</u>		

Antiglaucoma agents

Antiobesity agents

Combinatorial library

Feed additives

Human

(preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Growth promoters, animal

(preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Adrenoceptor agonists

(β_3 ; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT Adrenoceptors

(β_3 ; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 85-46-1, 1-Naphthalenesulfonyl chloride 98-09-9, Benzenesulfonyl

chloride 98-59-9, 4-Methylbenzenesulfonyl chloride 121-60-8,

4-Acetamidobenzenesulfonyl chloride 605-65-2, Dansyl chloride

1138-56-3, 4-Butoxybenzenesulfonyl chloride 1623-93-4,

Biphenyl-4-ylsulfonyl chloride 1939-99-7, Benzylsulfonyl chloride

2905-24-0, 3-Bromobenzenesulfonyl chloride 6553-96-4,

2,4,6-Triisopropylbenzenesulfonyl chloride 15084-51-2,

4-tert-Butylbenzenesulfonyl chloride 16712-69-9, 4-Ethylbenzenesulfonyl

chloride 54997-90-9, 4-Isopropylbenzenesulfonyl chloride 54997-92-1,

4-Butylbenzenesulfonyl chloride 64062-91-5, 4-Bromo-2-

ethylbenzenesulfonyl chloride 73713-79-8, 2,1,3-Benzothiadiazole-4-

sulfonyl chloride 82964-91-8, 4-(Methylsulfonyl)benzenesulfonyl

chloride 138872-44-3, 5-[(Benzoylamino)methyl]thiophene-2-sulfonyl

chloride 151858-64-9, 5-(Pyridin-2-yl)thiophene-2-sulfonyl chloride

166964-36-9, 4-Bromo-2,5-dichlorothiophene-3-sulfonyl chloride

166964-37-0, 5-(Phenylsulfonyl)thiophene-2-sulfonyl chloride

169677-20-7, 4-tert-Pentylbenzenesulfonyl chloride 175202-76-3,

5-[2-(Methylthio)pyrimidin-4-yl]thiophene-2-sulfonyl chloride

175202-87-6, 5-[[5-(Trifluoromethyl)pyridin-2-yl]sulfonyl]thiophene-2-

sulfonyl chloride

(combinatorial reactant; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 392688-52-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(naphthalene-2-

sulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392688-54-9P,

(2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(4-methoxybenzenesulfonyl)piperidin-4-

yl]methyl]amino]propan-2-ol 392688-58-3P, 4-[[[(2S)-2-Hydroxy-3-[[1-(4-

methoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol

392688-60-7P, 4-[[[(2S)-2-Hydroxy-3-[[1-(4-methoxybenzenesulfonyl)piperid

in-4-yl]methyl]amino]propyl]oxy]-1,3-dihydrobenzoimidazol-2-one

392688-63-0P, 4-[[[(2S)-2-Hydroxy-3-[[1-(3,4-

dimethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-

dihydrobenzoimidazol-2-one 392688-64-1P, 4-[[[(2S)-2-Hydroxy-3-[[1-(3,4-

dimethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol

(drug candidate; preparation of piperidine hydroxyaminopropyl ether and

hydroxyethylamine derivs. as β_3 adrenergic receptor agonists,

antidiabetics, and antiobesity agents)

IT 392689-39-3P, (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol 392689-40-6P,
 4-[[[(2S)-2-Hydroxy-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-41-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
 392689-42-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(phenylsulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one
 392689-43-9P, (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(4-isopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-44-0P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(4-isopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-45-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(4-isopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392689-46-2P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(4-isopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-47-3P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(4-isopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide 392689-48-4P,
 (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(4-ethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392689-49-5P, 4-[[[(2S)-3-[[[1-[(4-Ethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-50-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(4-ethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-51-9P, 4-[[[(2S)-3-[[[1-[(4-Ethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-52-0P, N-[5-[(1R)-2-[[[1-[(4-Ethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide
 392689-53-1P, (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(4-methoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-54-2P, (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-56-4P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]phenol
 392689-57-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-58-6P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-59-7P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(2,4,6-triisopropylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide 392689-60-0P,
 (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-61-1P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]phenol
 392689-62-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-63-3P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-64-4P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(2,3,4,5,6-pentamethylphenyl)sulfonyl]piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide 392689-65-5P,
 (2S)-1-[4-(BenzylOxy)phenoxy]-3-[[[1-[(4-(tert-pentyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-66-6P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(4-(tert-pentyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]phenol
 392689-67-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(4-(tert-pentyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol
 392689-68-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(4-(tert-

pentyl)phenylsulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-69-9P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[[4-(tert-pentyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-70-2P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-71-3P, 4-[[2S)-2-Hydroxy-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392689-72-4P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-73-5P, 4-[[2S)-2-Hydroxy-3-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-74-6P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-(1-naphthylsulfonyl)piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-75-7P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392689-76-8P, 4-[[2S)-2-Hydroxy-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392689-77-9P, 4-[[2S)-2-Hydroxy-3-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-78-0P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-(2-naphthylsulfonyl)piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-79-1P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[[4-(tert-butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-80-4P, 4-[[2S)-3-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-81-5P, (2S)-1-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-82-6P, 4-[[2S)-3-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-83-7P, N-[5-[(1R)-2-[[[1-[[4-(tert-Butyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-84-8P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[(4-bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-85-9P, 4-[[2S)-3-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-86-0P, (2S)-1-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-87-1P, 4-[[2S)-3-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-88-2P, N-[5-[(1R)-2-[[[1-[(4-Bromo-2-ethylphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-89-3P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[(4-bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-90-6P, 4-[[2S)-3-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-91-7P, (2S)-1-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392689-92-8P, 4-[[2S)-3-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-93-9P, N-[5-[(1R)-2-[[[1-[(4-Bromo-2,5-dichlorothien-3-yl)sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-94-0P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[[1-[(3-bromophenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392689-95-1P, 4-[[2S)-3-[[[1-[(3-Bromophenyl)sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392689-96-2P, (2S)-1-[[[1-[(3-Bromophenyl)sulfonyl]piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-

yloxy)propan-2-ol 392689-97-3P, 4-[[[2S]-3-[[1-[(3-Bromophenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392689-98-4P 392690-00-5P,
 N-[[5-[[4-[[[2S]-3-[4-(Benzyl)oxy]phenoxy]-2-hydroxypropyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-yl)methyl]benzamide 392690-02-7P, N-[[5-[[4-[[[2S]-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-yl)methyl]benzamide 392690-04-9P, N-[[5-[[4-[[[2S]-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-yl)methyl]benzamide 392690-06-1P, N-[[5-[[4-[[[2S]-2-Hydroxy-3-[(2-oxo-2,3-dihydro-1H-benzimidazol-4-yl)oxy]propyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-yl)methyl]benzamide 392690-08-3P,
 N-[[5-[[4-[[[2R]-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]thien-2-yl)methyl]benzamide 392690-10-7P, (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[1-[(4-butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392690-12-9P, (2S)-1-[[1-[(4-Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-14-1P,
 4-[[[2S]-3-[[1-[(4-Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-15-2P,
 N-[[5-[(1R)-2-[[1-[(4-Butoxyphenyl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392690-17-4P,
 (2S)-1-[4-(Benzyl)oxy]phenoxy]-3-[[1-[(4-butyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392690-19-6P, 4-[[[2S]-3-[[1-[(4-Butyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-21-0P, (2S)-1-[[1-[(4-Butyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-23-2P, 4-[[[2S]-3-[[1-[(4-Butyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-25-4P, N-[[5-[(1R)-2-[[1-[(4-Butyl)phenyl)sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392690-27-6P, N-[[4-[[4-[[[2S]-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]acetamide 392690-28-7P, N-[[4-[[4-[[[2S]-2-Hydroxy-3-[(2-oxo-2,3-dihydro-1H-benzimidazol-4-yl)oxy]propyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]acetamide 392690-29-8P, (2S)-1-[[4-(Benzyl)oxy]phenoxy]-3-[[1-[[1,1'-biphenyl]-4-yl]sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392690-30-1P, 4-[[[2S]-3-[[1-[[1,1'-Biphenyl]-4-yl]sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-31-2P, (2S)-1-[[1-[[1,1'-Biphenyl]-4-yl]sulfonyl]piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-32-3P, 4-[[[2S]-3-[[1-[[1,1'-Biphenyl]-4-yl]sulfonyl]piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-33-4P, N-[[5-[(1R)-2-[[1-[[1,1'-Biphenyl]-4-yl]sulfonyl]piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392690-34-5P, (2S)-1-[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl)methyl]amino]-3-[(benzyl)oxy]phenoxy]propan-2-ol 392690-35-6P, 4-[[[2S]-3-[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-36-7P, (2S)-1-[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl)methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-37-8P, 4-[[[2S]-3-[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-38-9P, N-[[5-[(1R)-2-[[1-(2,1,3-Benzothiadiazol-4-ylsulfonyl)piperidin-4-yl)methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392690-39-0P, (2S)-1-[[4-(Benzyl)oxy]phenoxy]-3-[[1-

(benzylsulfonyl)piperidin-4-yl]methyl]amino]propan-2-ol 392690-40-3P,
 (2S)-1-[[[1-(Benzylsulfonyl)piperidin-4-yl]methyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol 392690-41-4P, 4-[[[(2S)-3-[[[1-(Benzylsulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-42-5P, (2S)-1-[4-(Benzylxyloxy)phenoxy]-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-43-6P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-44-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-45-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-(methylsulfonyl)phenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-46-9P, (2S)-1-[4-(Benzylxyloxy)-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-47-0P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-49-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-50-5P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-(phenylsulfonyl)thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-51-6P, (2S)-1-[4-(Benzylxyloxy)-3-[[[1-[[4-methylphenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-52-7P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-methylphenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-53-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[4-methylphenyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-54-9P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[4-methylphenyl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-55-0P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[[4-methylphenyl]sulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392690-56-1P, (2S)-1-[4-(Benzylxyloxy)phenoxy]-3-[[[1-[(3,4-dimethoxyphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-57-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(3,4-dimethoxyphenyl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-58-3P, N-[5-[(1R)-2-[[[1-[(3,4-Dimethoxyphenyl)sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392690-59-4P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-[(5-(trifluoromethyl)pyridin-2-yl)sulfonyl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-60-7P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-[(5-(trifluoromethyl)pyridin-2-yl)sulfonyl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-61-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[[5-[(5-(trifluoromethyl)pyridin-2-yl)sulfonyl]thien-2-yl]sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-62-9P, (2S)-1-[4-(Benzylxyloxy)phenoxy]-3-[[[1-[[5-(dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-63-0P, 4-[[[(2S)-3-[[[1-[[5-(Dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]phenol 392690-64-1P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[[5-(dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-65-2P, 4-[[[(2S)-3-[[[1-[[5-(Dimethylamino)-1-naphthyl]sulfonyl]piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-66-3P, (2S)-1-[4-(Benzylxyloxy)phenoxy]-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propan-2-ol 392690-67-4P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392690-68-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-

- yl]methyl]amino]propan-2-ol 392690-70-9P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(5-pyridin-2-ylthien-2-yl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-71-0P, (2S)-1-[4-(Benzyl oxy)phenoxy]-3-[[[1-[(5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392690-72-1P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-[(5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl)sulfonyl]piperidin-4-yl)methyl]amino]propan-2-ol 392690-73-2P, 4-[[[(2S)-2-Hydroxy-3-[[[1-[(5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl)sulfonyl]piperidin-4-yl)methyl]amino]propyl]oxy]-1,3-dihydro-2H-benzimidazol-2-one 392690-74-3P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[(5-[2-(methylthio)pyrimidin-4-yl]thien-2-yl)sulfonyl]piperidin-4-yl)methyl]amino]ethyl]phenyl]methanesulfonamide (drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 392688-10-7P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392688-15-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-propylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-19-6P, (2S)-1-(4-Benzyl oxyphenoxy)-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-23-2P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392689-11-1P, [3-Fluoro-4-[[[4-[[4-[[[(R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]amino]carbonyl]amino]methyl]phenoxy]acetic acid methyl ester 392689-19-9P, [1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indol-3-yl]acetic acid ethyl ester 392689-21-3P, 1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid methyl ester 392689-23-5P, Ethyl 1-[4-[4-[[[(2R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylate 392689-34-8P, (2S)-1-[[4-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]pyrrolidine-2-carboxylic acid methyl ester (drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 392688-07-2P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-09-4P, (2S)-1-(4-Benzyl oxyphenoxy)-3-[[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-11-8P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl)methyl]amino]propyl]oxy]fluoren-9-one oxime 392688-12-9P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propan-2-ol 392688-13-0P, 4-[[[(2S)-2-Hydroxy-3-[[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392688-14-1P, 1-[[[(2S)-2-Hydroxy-3-[[[4'-trifluoromethyl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392688-16-3P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-isopropylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-17-4P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-21-0P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392688-25-4P, 4-[[[(2S)-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-

4-yl]methyl]amino]propyl]oxy]-9H-fluoren-9-ol 392688-27-6P,
4-[(2S)-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-
yl]methyl]amino]propyl]oxy]-9H-carbazol-3-ol 392688-29-8P,
(2S)-1-[(1-Bromo-9H-carbazol-4-yl)oxy]-3-[[[1-(3,3,3-
trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-31-2P,
(2S)-1-[(1-Chloro-9H-carbazol-4-yl)oxy]-3-[[[1-(3,3,3-
trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-33-4P,
(2S)-1-[(3-Bromo-9H-carbazol-4-yl)oxy]-3-[[[1-(3,3,3-
trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-35-6P,
(2S)-1-[(3-Chloro-9H-carbazol-4-yl)oxy]-3-[[[1-(3,3,3-
trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-37-8P,
(2S)-1-(1H-Indol-4-yloxy)-3-[[[1-(3,3,3-trifluoropropyl)piperidin-4-
yl)methyl]amino]propan-2-ol 392688-39-0P, (2S)-1-(1H-Indol-5-yloxy)-3-
[[[1-(3,3,3-trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol
392688-41-4P, 4-[(2S)-2-Hydroxy-3-[[[1-(3,3,3-trifluoropropyl)piperidin-
4-yl)methyl]amino]propyl]oxy]-1,3-dihydrobenzoimidazol-2-one
392688-43-6P, (2S)-1-[(2-Methyl-1H-indol-4-yl)oxy]-3-[[[1-(3,3,3-
trifluoropropyl)piperidin-4-yl)methyl]amino]propan-2-ol 392688-45-8P,
(2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-(4,4,4-trifluorobutyl)piperidin-4-
yl)methyl]amino]propan-2-ol 392688-46-9P, (2S)-1-(9H-Carbazol-4-yloxy)-
3-[[[1-pentylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-47-0P,
(2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-hexylpiperidin-4-
yl)methyl]amino]propan-2-ol 392688-48-1P, (2S)-1-(9H-Carbazol-4-yloxy)-
3-[[[1-octylpiperidin-4-yl)methyl]amino]propan-2-ol 392688-49-2P,
(2S)-1-(9H-Carbazol-4-yloxy)-3-[(1-tridecylpiperidin-4-
ylmethyl)amino]propan-2-ol 392688-50-5P, (2S)-1-(9H-Carbazol-4-yloxy)-3-
[(1-pentadecylpiperidin-4-ylmethyl)amino]propan-2-ol 392688-51-6P,
12-[4-[[[2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperi-
din-1-yl)dodecan-1-ol 392688-53-8P, (2S)-1-(9H-Carbazol-4-yloxy)-3-[[[1-
(prop-2-ylsulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
392688-55-0P, (2S)-1-[(3-Bromo-9H-carbazol-4-yl)oxy]-3-[[[1-(4-
methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
392688-56-1P, (2S)-1-[(3-Chloro-9H-carbazol-4-yl)oxy]-3-[[[1-(4-
methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
392688-57-2P, (2S)-1-[(1-Bromo-9H-carbazol-4-yl)oxy]-3-[[[1-(4-
methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]propan-2-ol
392688-59-4P, 4-[(2S)-2-Hydroxy-3-[[[1-(4-methoxybenzenesulfonyl)piperid-
in-4-yl)methyl]amino]propyl]oxy]fluoren-9-one 392688-61-8P,
4-[(2S)-2-Hydroxy-3-[[[1-(4-methoxybenzenesulfonyl)piperidin-4-
yl)methyl]amino]propyl]oxy]-2-methyl-1H-indole 392688-62-9P,
4-[(2S)-3-[[[1-(4-Methoxybenzenesulfonyl)piperidin-4-yl)methyl]amino]-2-
hydroxypropyl]oxy]-1,3-dihydroindol-2-one 392688-65-2P,
4-[(2S)-3-[[[1-(3,4-Dimethoxybenzenesulfonyl)piperidin-4-
yl)methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one
392688-66-3P, 4-[(2S)-2-Hydroxy-3-[[[1-(4-nitrobenzenesulfonyl)piperidin-
4-yl)methyl]amino]propyl]oxy]phenol 392688-67-4P, 4-[(2S)-2-Hydroxy-3-
[[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
yl)methyl]amino]propyl]oxy]-1,3-dihydroindol-2-one 392688-68-5P,
4-[(2S)-2-Hydroxy-3-[[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
yl)methyl]amino]propyl]oxy]phenol 392688-69-6P, (1R)-1-(3-Chlorophenyl)-
2-[[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-
yl)methyl]amino]ethanol 392688-70-9P, 4-[(2S)-2-Hydroxy-3-[[[1-((1-
methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-
yl)methyl]amino]propyl]oxy]phenol 392688-71-0P, 3-[[4-[[[2S)-3-(9H-
Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-
carbonyl]amino]benzoic acid ethyl ester 392688-72-1P,
3-[[4-[[[2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperi-

dine-1-carbonyl]amino]benzoic acid 392688-73-2P, 3-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392688-74-3P, 4-[[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392688-75-4P, 4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392688-76-5P, 4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-carboxylic acid hexylamide 392688-77-6P, 4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-carboxylic acid cyclohexylamide 392688-79-8P, 4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-carboxylic acid cyclohexylamide 392688-80-1P, 1-[4-[[4-[[[(2S)-3-(9H-Carbazol-4-yloxy)-2-hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-hexylurea 392688-81-2P, 1-Hexyl-3-[4-[[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392688-82-3P, 1-Hexyl-3-[4-[[4-[[[(2S)-2-hydroxy-3-((2-oxo-2,3-dihydro-1H-benzimidazol-4-yl)oxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392688-83-4P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-((2-methyl-1H-indol-7-yl)oxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-phenylurea 392688-84-5P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzimidazol-4-yloxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-phenylurea 392688-85-6P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-phenylurea 392688-86-7P, 1-Cyclohexyl-3-[4-[[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392688-87-8P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-isobutylurea 392688-88-9P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-pyridin-2-ylurea 392688-89-0P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[[1-[4-[[3-(pyridin-2-yl)ureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392688-90-3P, N-[5-[1-Hydroxy-2-[[[1-[4-[[3-(pyridin-2-yl)ureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]-1H-indol-7-yl]methanesulfonamide 392688-91-4P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392688-92-5P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-((2-oxo-2,3-dihydro-1H-indol-4-yl)oxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392688-93-6P, 4-[[2-Hydroxy-3-[[[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1H-indole-2-carboxylic acid amide 392688-94-7P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(1H-indol-5-yloxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392688-95-8P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[[[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392688-96-9P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-[(8-hydroxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yl)oxy]propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392688-97-0P, 1-[4-[[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-(3-thiophen-2-ylpropyl)urea 392688-98-1P, 1-(2,5-Difluorobenzyl)-3-[4-[[4-[[[(2S)-2-hydroxy-3-(1H-indol-5-yloxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-00-8P, 1-(2,5-Difluorobenzyl)-3-[4-[[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-01-9P, 1-(2,5-Difluorobenzyl)-3-[4-[[4-[[[(2S)-3-(3-fluoro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-02-0P, N-[5-[[[(2S)-3-[[[1-[4-[[3-(2,5-Difluorobenzyl)ureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-2-

hydroxypropyl]oxy]-2-hydroxyphenyl]methanesulfonamide 392689-03-1P,
 1-[4-[4-[[[(2S)-3-(2-Chloro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-(2,5-difluorobenzyl)urea 392689-04-2P, N-[5-[(1R)-2-[[[1-[[4-[[[(2-(2,5-Difluorophenyl)ethyl]amino]carbonyl]amino]phenyl]sulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-05-3P, 1-[2-(2,4-Difluorophenyl)ethyl]-3-[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-06-4P, 1-(2,6-Difluorophenyl)-3-[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]urea 392689-07-5P, N-[5-[(1R)-2-[[[1-[4-[3-(2,6-Difluorobenzyl)-3-isopropylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-08-6P, N-[5-[2-[[[1-[4-[3-(2,6-Difluorobenzyl)-3-methylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-09-7P, N-[5-[(1R)-2-[[[1-[4-[3-(2,5-Difluorobenzyl)-3-isopropylureido]benzenesulfonyl]piperidin-4-yl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-10-0P, N-[5-[(R)-2-[[[1-[4-[[[(2,5-Difluorophenyl)methyl]methyl]amino]carbonyl]amino]phenyl]sulfonyl]-4-piperidinyl]methyl]amino]-1-hydroxyethyl]-2-hydroxyphenyl]methanesulfonamide 392689-12-2P, [3-Fluoro-4-[[[[4-[[4-[[[(R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidinyl]sulfonyl]phenyl]amino]carbonyl]amino]methyl]phenoxy]acetic acid 392689-13-3P, Heptanoic acid[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]amide 392689-14-4P, N-(2,6-Difluorobenzyl)-4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]benzamide 392689-15-5P, 1H-Indazole-3-carboxylic acid[4-[4-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]amide 392689-16-6P, 4-[[[(2S)-2-Hydroxy-3-[[1-((4-(pyrazol-1-yl)phenyl)sulfonyl)piperidin-4-yl)methyl]amino]propyl]oxy]phenol 392689-17-7P, 1-[4-[4-[[[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-methylimidazolidin-2-one 392689-18-8P, 1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-2-carboxylic acid ethyl ester 392689-20-2P, [1-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indol-3-yl]acetic acid 392689-22-4P, 1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-(methanesulfonylamino)phenyl]ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid 392689-24-6P, 1-[4-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylic acid 392689-25-7P, 4-[[[(2S)-2-Hydroxy-3-[[1-[4-(5-octyl-1,2,4-oxadiazol-3-yl)benzenesulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]phenol 392689-26-8P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[[1-[4-[5-octyl-1,2,4-oxadiazol-3-yl)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-27-9P, 3-[3-[4-[[[(2R)-2-Hydroxy-2-(4-hydroxy-3-(methanesulfonylamino)phenyl)ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propionic acid methyl ester 392689-28-0P, 3-[3-[4-[[[(2S)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-piperidinyl]sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid 392689-29-1P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[[1-[4-(piperidine-1-sulfonyl)phenyl]piperidin-4-yl]methyl]amino]ethyl]phenyl]methanesulfonamide 392689-30-4P, Methyl 6-[4-[[[(2R)-2-hydroxy-2-[4-hydroxy-3-

[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]nicotinate 392689-31-5P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid 392689-32-6P,
 (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid 392689-33-7P,
 (2R)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid 392689-35-9P, (2S)-1-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]pyrrolidine-2-carboxylic acid 392689-36-0P, (2S)-2-[[4-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]anilino]carbonyl]amino]-3-phenylpropanoic acid 392689-37-1P, (2S)-2-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid 392689-38-2P,
 (2S)-1-[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid 392692-26-1P,
 (2S)-1-(9H-Carbazol-4-yloxy)-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propan-2-ol dihydrochloride 392692-27-2P, 4-[[2S)-2-Hydroxy-3-[[1-(7-trifluoromethylquinolin-4-yl)piperidin-4-yl]methyl]amino]propyl]oxy]fluoren-9-one oxime dihydrochloride 392692-30-7P, 4-[[2S)-3-[[1-(4-Methoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one hydrochloride 392692-31-8P, 4-[[2S)-3-[[1-(3,4-Dimethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]-2-hydroxypropyl]oxy]-1,3-dihydroindol-2-one hydrochloride 392692-32-9P,
 4-[[2S)-2-Hydroxy-3-[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]propyl]oxy]phenol hydrochloride 392692-33-0P,
 (1R)-1-(3-Chlorophenyl)-2-[[1-(4-trifluoromethoxybenzenesulfonyl)piperidin-4-yl]methyl]amino]ethanol hydrochloride 392692-39-6P,
 N-[5-[1-Hydroxy-2-[[1-[4-(3-(pyridin-2-yl)ureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]ethyl]-1H-indol-7-yl]methanesulfonamide dihydrochloride 392692-40-9P, 4-[[2-Hydroxy-3-[[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-yl]methyl]amino]propyl]oxy]-1H-indole-2-carboxylic acid amide hydrochloride 392692-47-6P,
 1-[4-[4-[[[(2R)-2-Hydroxy-2-(4-hydroxy-3-(methanesulfonylamino)phenyl)ethyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-1H-indole-4-carboxylic acid methyl ester hydrochloride 392692-48-7P, Ethyl 1-[4-[[4-[[[(2R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]sulfonyl]phenyl]-1H-pyrazole-4-carboxylate hydrochloride 392692-52-3P, Methyl 6-[4-[[[(2R)-2-hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]nicotinate hydrochloride
 (drug candidate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 312-32-3P, 1-[(4-Fluorophenyl)sulfonyl]piperidine 403-14-5P,
 1-(3-Fluoro-4-hydroxyphenyl)-1-ethanone 3363-68-6P,
 1-Methyl-3-phenylimidazolidin-2-one 7699-17-4P, 4-Methoxy-2-oxindole 13402-55-6P, 4-Hydroxy-2-oxindole 19689-86-2P, 2-Methoxy-6-nitrobenzyl bromide 20876-27-1P, 2-Methoxy-6-nitrobenzyl cyanide 20876-28-2P,
 2-Methoxy-6-nitrophenylacetic acid 22265-59-4P, 2,6-Difluoro-N-methylbenzamide 29650-44-0P, 2-Fluorophenyl acetate 34583-53-4P,

N-Octyl-N'-phenylurea 59430-56-7P, 5,8-Dihydroxy-3,4-dihydro-2(1H)-quinolinone 59826-16-3P, 8-(Benzyl oxy)-5-hydroxy-3,4-dihydro-2(1H)-quinolinone 64469-32-5P, N1-Methyl-N2-phenylethylenediamine 70260-86-5P, 4-((2S)-Oxiranyl)methoxy)-1H-indole 88915-26-8P, 4-Aminomethyl-1-benzylpiperidine 95093-95-1P, 4-((2S)-Oxiranyl)methoxy)-9H-carbazole 108534-48-1P, tert-Butyl(4-hydroxyphenoxy)diphenylsilane 122797-04-0P, (S)-2-[(4-(Benzyl oxy)phenoxy)methyl]oxirane 122860-33-7P, N-(Benzyl oxycarbonyl)-4-(hydroxymethyl)piperidine 132740-52-4P, 4-Aminomethyl-1-isopropylpiperidine 135632-53-0P, (Piperidin-4-ylmethyl)carbamic acid tert-butyl ester 138163-08-3P, N-(Benzyl oxycarbonyl)-4-formylpiperidine 173340-23-3P, [(1-Benzylpiperidin-4-yl)methyl]carbamic acid tert-butyl ester 188646-83-5P, 4-Formylpiperidine dimethyl acetal 197774-51-9P, 4-((2S)-Oxiranyl)methoxy)benzimidazol-2-one 199856-06-9P, 1-Hexylpiperidine-4-carboxamide 200725-66-2P, 1-Pentylpiperidine-4-carboxamide 246262-32-8P, 5-((2S)-Oxiranyl)methoxy)-1H-indole 246544-68-3P, 4-Aminomethyl-1-hexylpiperidine 256373-18-9P, 4-((2S)-Oxiranyl)methoxy)-2-methylindole 258345-25-4P, 4-Aminomethyl-1-pentylpiperidine 280115-83-5P, 1-Isopropylpiperidine-4-carboxamide 292080-51-4P, 1-Propylpiperidine-4-carboxamide 300345-77-1P, 5-(2-Azido-1-(R)-hydroxyethyl)-2-(benzyl oxy)methanesulfonanilide 326898-48-0P, 4-Carbamoyl-1-piperidinyl 4-nitrophenyl sulfone 332391-26-1P, 4-Carbamoyl-1-piperidinyl 4-methoxyphenyl sulfone 335390-47-1P, N-Cyclohexyl-4-carbamoyl-1-piperidinecarboxamide 340756-75-4P, 2-(4-Hydroxy-3-(methanesulfonamido)phenyl)-(2R)-2-hydroxyethylamine 373359-46-7P, 8-(Benzyl oxy)-5-((2S)-oxiranyl)methoxy)-3,4-dihydro-2(1H)-quinolinone 373359-49-0P, 5-Chloroacetyl-2-benzyl oxymethanesulfonanilide 391671-82-2P, tert-Butyl-[4-((2S)-oxiranyl)methoxy]phenoxy)diphenylsilane 391674-01-4P, tert-Butyl[4-(benzyl oxy)phenoxy]diphenylsilane 392620-57-4P, 4-((tert-Butyldiphenylsilyl)oxy)-3-nitroacetophenone 392620-63-2P, Acetic acid 3-nitro-4-(tert-Butyldiphenylsilyloxy)phenyl ester 392620-67-6P, Acetic acid 3-amino-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-72-3P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-[(methylsulfonyl)amino]phenyl acetate 392620-76-7P, 3-[(t-Butoxycarbonyl)(methylsulfonyl)amino]-4-[(tert-butyldiphenylsilyl)oxy]phenyl acetate 392621-01-1P, tert-Butyl-[2-fluoro-4-((2S)-oxiranyl)methoxy]phenoxy)diphenylsilane 392621-05-5P, 1-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl]-1-ethanone 392621-09-9P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl acetate 392621-13-5P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenol 392621-56-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorobenzaldehyde 392621-60-2P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenyl formate 392621-64-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenol 392621-68-0P, tert-Butyl-[3-chloro-4-((2S)-oxiranyl)methoxy]phenoxy)diphenylsilane 392636-61-2P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzonitrile 392636-65-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-fluorobenzylamine 392636-87-2P, [4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzyl]carbamic acid tert-butyl ester 392636-92-9P, (2-Fluoro-4-hydroxybenzyl)carbamic acid tert-butyl ester 392637-33-1P, [4-[(tert-Butoxycarbonyl)amino]methyl]-3-fluorophenoxy]acetic acid methyl ester 392637-38-6P, [4-(Aminomethyl)-3-fluorophenoxy]acetic acid methyl ester 392642-82-9P, 4-[(Octylamino)carbonyl]amino]benzenesulfonyl chloride 392690-75-4P, 1-Bromo-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-76-5P, 3-Bromo-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-77-6P, 1-Chloro-4-((2S)-oxiranyl)methoxy)-9H-carbazole 392690-78-7P, 3-Chloro-4-((2S)-oxiranyl)methoxy)-9H-carbazole

392690-79-8P, 3-Hydroxy-4-((2S)-oxiranyl)methoxy)-9H-carbazole
392690-80-1P, 4-((2S)-Oxiranyl)methoxy)-9-fluorenone 392690-81-2P,
1-((2S)-Oxiranyl)methoxy)-9-fluorenone 392690-82-3P,
4-((2S)-Oxiranyl)methoxy)-2-oxindole 392690-83-4P,
N-[2-[(tert-Butyldiphenylsilyl)oxy]-5-((2S)-
oxiranyl)methoxy]phenylmethanesulfonamide 392690-84-5P,
N-[2-[(tert-Butyldiphenylsilyl)oxy]-5-hydroxyphenyl]methanesulfonamide
392690-85-6P, 5-(2-Chloro-1-(R)-hydroxyethyl)-2-
(benzyloxy)methanesulfonanilide 392690-86-7P, 4-Carbamoyl-1-piperidinyl
4-aminophenyl sulfone 392690-87-8P, [[1-(4-
Aminobenzenesulfonyl)piperidin-4-yl]methyl]carbamic acid tert-butyl ester
392690-88-9P, 4-(Aminomethyl)piperidin-1-yl 4-nitrophenyl sulfone
392690-89-0P, [1-(4-Aminobenzenesulfonyl)piperidin-4-yl]methanol dimethyl
acetal 392690-90-3P, [1-(4-Nitrobenzenesulfonyl)piperidin-4-yl]methanol
392690-91-4P, 1-(4-Nitrobenzenesulfonyl)piperidine-4-carboxaldehyde
392690-92-5P, 4-(Dimethoxymethyl)-1-(4-nitrobenzenesulfonyl)piperidine
392690-93-6P, N-(Benzylloxycarbonyl)-4-formylpiperidine dimethyl acetal
392690-94-7P, [1-(4-Fluorobenzenesulfonyl)piperidin-4-yl]carboxaldehyde
dimethyl acetal 392690-95-8P, 4-Hydroxymethylpiperidin-1-yl
4-fluorophenyl sulfone 392690-96-9P, [1-(4-
Fluorobenzenesulfonyl)piperidin-4-yl]carboxaldehyde 392690-97-0P,
4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoic acid 392690-98-1P, Methyl
4-[(4-hydroxymethyl)piperidin-1-yl]benzoate 392690-99-2P, Methyl
4-(4-formylpiperidin-1-yl)benzoate 392691-00-8P, Methyl
4-[4-(dimethoxymethyl)piperidin-1-yl]benzoate 392691-01-9P,
[[1-[[4-[Amino(hydroxyimino)methyl]phenyl]sulfonyl]-4-
piperidinyl]methyl]carbamic acid tert-butyl ester 392691-02-0P,
1-(7-Trifluoromethyl-4-quinolyl)piperidine-4-carboxamide 392691-03-1P,
4-Aminomethyl-1-(7-trifluoromethyl-4-quinolyl)piperidine 392691-04-2P,
4-Aminomethyl-1-(4-trifluoromethyl-2-pyridyl)piperidine 392691-05-3P,
4-Aminomethyl-1-propylpiperidine 392691-06-4P, 1-(3,3,3-
Trifluoropropyl)piperidine-4-carboxamide 392691-07-5P,
4-Aminomethyl-1-(3,3,3-trifluoropropyl)piperidine 392691-08-6P,
1-(4,4,4-Trifluorobutyl)piperidine-4-carboxamide 392691-09-7P,
4-Aminomethyl-1-(4,4,4-trifluorobutyl)piperidine 392691-10-0P,
1-Octylpiperidine-4-carboxamide 392691-11-1P, 4-Aminomethyl-1-
octylpiperidine 392691-12-2P, 1-Tridecylpiperidine-4-carboxamide
392691-13-3P, 4-Aminomethyl-1-tridecylpiperidine 392691-14-4P,
1-Pentadecylpiperidine-4-carboxamide 392691-15-5P, 4-Aminomethyl-1-
pentadecylpiperidine 392691-16-6P, 1-(12-Hydroxydodecyl)piperidine-4-
carboxamide 392691-17-7P, 4-Aminomethyl-1-(12-hydroxydodecyl)piperidine
392691-18-8P, 4-Carbamoyl-1-piperidinyl 2-naphthyl sulfone
392691-19-9P, 4-Aminomethyl-1-piperidinyl 2-naphthyl sulfone
392691-20-2P, 4-Carbamoyl-1-piperidinyl propan-2-yl sulfone
392691-21-3P, 4-Aminomethyl-1-piperidinyl propane-2-yl sulfone
392691-22-4P, 4-Aminomethyl-1-piperidinyl 4-methoxyphenyl sulfone
392691-23-5P, 4-Carbamoyl-1-piperidinyl 3,4-dimethoxyphenyl sulfone
392691-24-6P, 4-Aminomethyl-1-piperidinyl 3,4-dimethoxyphenyl sulfone
392691-25-7P, 4-Aminomethyl-1-piperidinyl 4-trifluoromethoxyphenyl
sulfone 392691-26-8P, [[1-(4-Trifluoromethoxybenzenesulfonyl)piperidin-
4-yl]methyl]carbamic acid tert-butyl ester 392691-27-9P,
4-Aminomethyl-1-piperidinyl 4-trifluoromethoxyphenyl sulfone
trifluoroacetate 392691-28-0P, [[1-((1-Methyl-1H-imidazol-4-
yl)sulfonyl)piperidin-4-yl]methyl]amine 392691-29-1P,
[[1-((1-Methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-yl]methyl]carbamic
acid tert-butyl ester 392691-30-4P, N-(3-Ethoxycarbonylphenyl)-4-
carbamoyl-1-piperidinecarboxamide 392691-31-5P, N-(3-

Ethoxycarbonylphenyl)-4-(aminomethyl)-1-piperidinecarboxamide
 392691-32-6P, 3-[4-[(2S)-2-Benzylxy-3-(4-hydroxyphenoxy)propyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392691-33-7P, N-(4-Ethoxycarbonylphenyl)-4-carbamoyl-1-piperidinecarboxamide 392691-34-8P, N-(4-Ethoxycarbonylphenyl)-4-(aminomethyl)-1-piperidinecarboxamide 392691-35-9P, 4-[[4-[(2S)-2-Hydroxy-3-(4-benzylxyphenoxy)propyl]amino]methyl]piperidine-1-carbonyl]amino]benzoic acid ethyl ester 392691-36-0P, N-Hexyl-4-carbamoyl-1-piperidinecarboxamide 392691-37-1P, N-Hexyl-4-(aminomethyl)-1-piperidinecarboxamide 392691-38-2P, N-Cyclohexyl-4-(aminomethyl)-1-piperidinecarboxamide 392691-39-3P, 1-[4-[(4-Carbamoylpiperidin-1-yl)sulfonyl]phenyl]-3-hexylurea 392691-40-6P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-hexylurea 392691-41-7P, 1-[4-(4-Carbamoylpiperidine-1-sulfonyl)phenyl]-3-phenylurea 392691-42-8P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-phenylurea 392691-43-9P, 1-[4-[4-(Aminomethyl)piperidin-1-yl)sulfonyl]phenyl]-3-cyclohexylurea 392691-44-0P, 1-[4-[4-(Aminomethyl)piperidin-1-yl)sulfonyl]phenyl]-3-isobutylurea 392691-45-1P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-(2-pyridyl)urea 392691-46-2P, [1-[4-[3-(2-Pyridyl)ureido]phenyl]sulfonyl]piperidin-4-yl]carboxaldehyde 392691-47-3P, 1-[4-(4-Carbamoylpiperidine-1-sulfonyl)phenyl]-3-octylurea 392691-48-4P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-octylurea 392691-49-5P, 1-[4-[4-(Hydroxymethyl)piperidine-1-sulfonyl]phenyl]-3-octylurea 392691-50-8P, 1-[4-(4-Formylpiperidine-1-sulfonyl)phenyl]-3-octylurea 392691-51-9P, [[1-[4-[[3-(2-Thienyl)propyl]amino]carbonyl]amino]phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-52-0P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-(3-(thiophen-2-yl)propyl)urea 392691-53-1P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-(2,5-difluorobenzyl)urea 392691-54-2P, 1-[2-(2,5-Difluorophenyl)ethyl]-3-[4-[4-(dimethoxymethyl)piperidine-1-sulfonyl]phenyl]urea 392691-55-3P, 1-[2-(2,5-Difluorophenyl)ethyl]-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]urea 392691-56-4P, [[1-[4-[3-(2,6-Difluorophenyl)ureido]benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-57-5P, 1-[4-[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-(2,6-difluorophenyl)urea 392691-58-6P, N-Isopropyl-2,6-difluorobenzamide 392691-59-7P, 2,6-Difluoro-N-isopropylbenzylamine 392691-60-0P, 1-(2,6-Difluorobenzyl)-3-[4-[4-(dimethoxymethyl)piperidine-1-sulfonyl]phenyl]-1-isopropylurea 392691-61-1P, 1-(2,6-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-isopropylurea 392691-62-2P, 2,6-Difluoro-N-methylbenzylamine 392691-63-3P, 1-(2,6-Difluorobenzyl)-3-[4-(4-(dimethoxymethyl)piperidine-1-sulfonyl)phenyl]-1-methylurea 392691-64-4P, 1-(2,6-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-methylurea 392691-65-5P, 2,5-Difluoro-N-isopropylbenzamide 392691-66-6P, 2,5-Difluoro-N-isopropylbenzylamine 392691-67-7P, 1-(2,5-Difluorobenzyl)-3-[4-[4-(dimethoxymethyl)piperidine-1-sulfonyl]phenyl]-1-isopropylurea 392691-68-8P, 1-(2,5-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-isopropylurea 392691-69-9P, 2,5-Difluoro-N-methylbenzamide 392691-70-2P, 2,5-Difluoro-N-methylbenzylamine 392691-71-3P, 1-(2,5-Difluorobenzyl)-3-[4-(4-dimethoxymethyl)piperidine-1-sulfonyl]phenyl]-1-methylurea 392691-72-4P, 1-(2,5-Difluorobenzyl)-3-[4-(4-formylpiperidine-1-sulfonyl)phenyl]-1-methylurea 392691-73-5P, [4-[3-[4-(Dimethoxymethyl)piperidine-1-sulfonyl]phenyl]ureido]methyl]-3-fluorophenoxy]acetic acid methyl ester 392691-74-6P,

[4-[[3-[4-(4-Formylpiperidine-1-sulfonyl)phenyl]ureido]methyl]-3-fluorophenoxy]acetic acid methyl ester 392691-75-7P,
[[1-[4-(Heptanamido)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-76-8P, N-[4-[[4-(Aminomethyl)-1-piperidinyl]sulfonyl]phenyl]heptanamide 392691-77-9P,
[[1-[4-[(2,6-Difluorobenzyl)amino]carbonyl]benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-78-0P,
4-[4-(Aminomethyl)piperidinyl-1-sulfonyl]-N-(2,6-difluorobenzyl)benzamide 392691-79-1P, [[1-[[4-[(1H-Indazol-3-yl)carbonyl]amino]phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-80-4P,
1H-Indazole-3-carboxylic acid [4-[(4-(aminomethyl)-1-piperidinyl)sulfonyl]phenyl]amide 392691-81-5P, [[1-[4-(Pyrazol-1-yl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-82-6P, 4-(Aminomethyl)-1-piperidinyl 4-(pyrazol-1-yl)phenyl sulfone 392691-83-7P, 4-(3-Methyl-2-oxoimidazolidin-1-yl)benzenesulfonyl chloride 392691-84-8P, [[1-[4-(3-Methyl-2-oxoimidazolidin-1-yl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392691-85-9P, 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-methylimidazolidin-2-one 392691-86-0P,
[1-[4-[2-(Ethoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-87-1P, [1-[4-[2-(Ethoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-88-2P, [1-[4-[3-[(Ethoxycarbonyl)methyl]indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-89-3P, [1-[4-[3-[(Ethoxycarbonyl)methyl]indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-90-6P,
[1-[4-(4-Methoxycarbonylindol-1-yl)benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-91-7P, [1-[4-[4-(Methoxycarbonyl)indol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-92-8P, [1-[4-[4-(Ethoxycarbonyl)pyrazol-1-yl]benzenesulfonyl]piperidin-4-yl]carboxaldehyde dimethyl acetal 392691-93-9P, [1-[4-(4-Ethoxycarbonylpyrazol-1-yl)benzenesulfonyl]piperidin-4-yl]carboxaldehyde 392691-94-0P,
[[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392691-95-1P,
[[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]amine 392691-96-2P, [1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]carboxaldehyde dimethyl acetal 392691-97-3P, [1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]carboxaldehyde 392691-98-4P, 3-[3-[[4-[(Dimethoxymethyl)-1-piperidinyl]sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester 392691-99-5P, 3-[3-[4-[(4-Formyl-1-piperidinyl)sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester 392692-00-1P,
[1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinyl]methanol 392692-01-2P, [1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinyl]carboxaldehyde 392692-02-3P, 1-(5-Methoxycarbonyl-2-pyridyl)-4-formylpiperidine 392692-03-4P, 1-(5-Methoxycarbonyl-2-pyridyl)-4-formylpiperidine dimethyl acetal 392692-04-5P,
(2S)-2-[[4-[(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-05-6P, (2S)-2-[[4-(Formyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-06-7P,
(2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-((methylsulfonyl)amino)phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-07-8P,
(2S)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid methyl ester 392692-08-9P, (2S)-2-[[4-(4-Formylpiperidin-1-yl)benzoyl]amino]-3-phenylpropanoic acid methyl ester

392692-09-0P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-3-phenylpropanoic acid methyl ester 392692-10-3P, (2R)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-11-4P, (2R)-2-[[4-[4-(Formyl)piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-12-5P, (2R)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]butanedioic acid dibenzyl ester 392692-13-6P, (2S)-1-[[4-(4-Dimethoxymethylpiperidine-1-sulfonyl)phenyl]carbamoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-14-7P, (2S)-1-[[4-(4-Formylpiperidine-1-sulfonyl)phenyl]carbamoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-15-8P, (2S)-2-[[3-[4-(4-Dimethoxymethylpiperidine-1-sulfonyl)phenyl]ureido]-3-phenylpropionic acid benzyl ester 392692-16-9P, (2S)-2-[[3-[4-(4-Formylpiperidine-1-sulfonyl)phenyl]ureido]-3-phenylpropionic acid benzyl ester 392692-17-0P, (2S)-2-[[4-[4-(Dimethoxymethyl)piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-18-1P, (2S)-2-[[4-[4-(Formyl)piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-19-2P, (2S)-2-[[4-[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]amino]-4-methylpentanoic acid ethyl ester 392692-20-5P, (2S)-1-[[4-(4-Dimethoxymethyl)piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-21-6P, (2S)-1-[[4-(4-Formylpiperidin-1-yl)benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-22-7P, (2S)-1-[[4-[[[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]piperidin-1-yl]benzoyl]pyrrolidine-2-carboxylic acid methyl ester 392692-23-8P, [(2-Amino-3-nitrobenzyl)methoxy]-S-oxirane 392692-24-9P, [[1-(4-Nitrobenzenesulfonyl)piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392692-34-1P, [[1-((1-Methyl-1H-imidazol-4-yl)sulfonyl)piperidin-4-yl]methyl]amine trifluoroacetate 392692-35-2P, 1-[[4-[4-(Aminomethyl)piperidin-1-yl]sulfonyl]phenyl]-3-isobutylurea trifluoroacetate 392692-36-3P, 1-[[4-[4-(Aminomethyl)piperidin-1-yl]sulfonyl]phenyl]-3-(2-pyridyl)urea trifluoroacetate 392692-37-4P, 1-[[4-[4-[[[(2S)-2-Hydroxy-3-(4-((tert-butyldiphenylsilyl)oxy)phenoxy)propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-pyridin-2-ylurea 392692-41-0P, 1-[[4-[4-[[[(2S)-2-Hydroxy-3-[(8-benzyloxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yl)oxy]propyl]amino]methyl]piperidine-1-sulfonyl]phenyl]-3-octylurea 392692-42-1P, 1-[[4-(Aminomethyl)piperidine-1-sulfonyl]phenyl]-3-[[3-(2-thienyl)propyl]urea formate salt 392692-46-5P, 1H-Indazole-3-carboxylic acid [4-[(4-(aminomethyl)-1-piperidinyl)sulfonyl]phenyl]amide formate salt 392692-49-8P, [[1-[[4-(5-Octyl-1,2,4-oxadiazol-3-yl)phenyl]sulfonyl]-4-piperidinyl]methyl]amine formate (intermediate; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

- IT 93-11-8, 2-Naphthylsulfonyl chloride 98-68-0, 4-Methoxybenzenesulfonyl chloride 6457-49-4, 4-Hydroxymethylpiperidine 23095-31-0, 3,4-Dimethoxybenzenesulfonyl chloride (precursor and combinatorial reactant; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)
- IT 75-30-9, 2-Iodopropane 75-31-0, Isopropylamine, reactions 78-81-9, Isobutylamine 96-32-2, Methyl bromoacetate 98-74-8, 4-Nitrobenzenesulfonyl chloride 100-39-0, Benzyl bromide 100-52-7,

Benzaldehyde, reactions 103-16-2, 4-Benzylxyphenol 103-71-9, Phenyl isocyanate, reactions 107-08-4, 1-Iodopropane 108-91-8, Cyclohexylamine, reactions 110-89-4, Piperidine, reactions 111-85-3, Octyl chloride 111-86-4, 1-Octylamine 142-04-1, Aniline hydrochloride 288-13-1, Pyrazole 346-55-4, 4-Chloro-7-trifluoromethylquinoline 349-88-2, 4-Fluorobenzenesulfonyl chloride 367-12-4, 2-Fluorophenol 385-00-2, 2,6-Difluorobenzoic acid 451-46-7, Ethyl 4-fluorobenzoate 460-37-7, 3,3,3-Trifluoropropyl iodide 461-17-6, 4,4,4-Trifluorobutyl iodide 504-29-0, 2-Aminopyridine 603-85-0, 2-Amino-3-nitrophenol 628-17-1, 1-Iodopentane 629-27-6, 1-Iodoctane 629-72-1, 1-Bromopentadecane 638-45-9, 1-Iodoheptane 764-85-2, Nonanoyl chloride 765-09-3, 1-Bromotridecane 778-82-5, 3-[(Ethoxycarbonyl)methyl]indole 1490-25-1, Methyl 4-chloro-4-oxobutanoate 1953-54-4, 5-Hydroxyindole 1986-00-1, 4-Hydroxy-9-fluorenone 2133-40-6, L-Proline methyl ester hydrochloride 2380-94-1, 4-Hydroxyindole 2462-32-0, L-Phenylalanine benzyl ester hydrochloride 2525-62-4, n-Hexyl isocyanate 2528-61-2, Heptanoyl chloride 2743-40-0, L-Leucine ethyl ester hydrochloride 2886-33-1, S-Aspartic acid dibenzyl ester p-tosylate 2991-28-8, 2,5-Difluorobenzoic acid 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate 3344-77-2 3770-50-1, 2-Ethoxycarbonylindole 4079-64-5, (R)-Aspartic acid dibenzyl ester p-tosylate 4498-67-3, 1H-Indazole-3-carboxylic acid 4653-11-6, 4-(2-Thienyl)butanoic acid 4837-88-1, 2-Methoxy-6-nitrotoluene 5509-65-9, 2,6-Difluoroaniline **6322-56-1**, 4-Hydroxy-3-nitroacetophenone 6344-60-1, 1-Hydroxy-9-fluorenone 7144-05-0, 4-(Aminomethyl)piperidine 7524-50-7, L-Phenylalanine methyl ester hydrochloride 10147-37-2, Isopropylsulfonyl chloride 14347-08-1, 5-Acetyl-2-benzyloxymethanesulfonanilide 19836-78-3, 3-Methyl-2-oxazolidinone 30806-83-8, 4-Ethoxycarbonylphenyl isocyanate 35320-67-3, 2-Methyl-4-hydroxyindole 37622-90-5, Ethyl pyrazole-4-carboxylate 39546-32-2, Isonipeptamide 39830-66-5, 4-Methoxycarbonylindole 52602-39-8, 4-Hydroxycarbazole 56962-11-9, 2-Chloro-4-hydroxybenzaldehyde 57044-25-4, (R)-(+)-Glycidol 58479-61-1, tert-Butylchlorodiphenylsilane 61306-74-9, 5,8-Dimethoxy-3,4-dihydro-2(1H)-quinolinone 62119-49-7, 4-(2-Oxiranylmethoxy)-2-indolecarboxamide 62600-71-9, 2-(3-Chlorophenyl)-(2R)-oxirane 62992-68-1, 1-Benzylisonipeptamide 67531-68-4, 3-Ethoxycarbonylphenyl isocyanate 69385-30-4, 2,6-Difluorobenzylamine 73781-91-6, Methyl 6-chloronicotinate 82380-18-5, 2-Fluoro-4-hydroxybenzonitrile 85118-06-5, 2,5-Difluorobenzylamine 94108-56-2, 4-Trifluoromethoxybenzenesulfonyl chloride 115314-14-2, (S)-(+)-Glycidyl 3-nitrobenzenesulfonate 118712-60-0, (S)-Glycidyl nosylate 130408-15-0, 3-(2,5-Difluorophenyl)propionic acid 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride 173901-02-5, 4-(3-Hexylureido)benzenesulfonyl chloride 392692-25-0, [[1-[(4-Cyanophenyl)sulfonyl]-4-piperidinyl]methyl]carbamic acid tert-butyl ester 392692-28-3, 1-(4-Trifluoromethyl-2-pyridyl)piperidine-4-carboxamide 392692-29-4, 4-Aminomethyl-1-piperidinyl 4-methoxyphenyl sulfone trifluoroacetate 392692-38-5, 2-(7-Methanesulfonamido-1H-indol-5-yl)-2-hydroxyethylamine 392692-43-2, N-[4-[(4-(Aminomethyl)-1-piperidinyl)sulfonyl]phenyl]-N'-(2,5-difluorobenzyl)urea formate 392692-44-3, 1-[4-[(4-(Aminomethyl)piperidine-1-sulfonyl)phenyl]-3-(2,4-difluorophenethyl)urea 392692-45-4, [[1-[4-(Hydroxycarbonyl)benzenesulfonyl]piperidin-4-yl]methyl]carbamic acid tert-butyl ester 392692-50-1, 4-[[4-(Dimethoxymethyl)-1-piperidinyl]sulfonyl]-N-hydroxybenzenecarboximidamide 392692-51-2, 3-[3-[4-[[4-[[2S]-2-Hydroxy-2-[4-hydroxy-

[(methylsulfonyl)amino]phenyl]ethyl]amino]methyl]-1-[piperidinyl]sulfonyl]phenyl]-1,2,4-oxadiazol-5-yl]propanoic acid methyl ester

(precursor; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 9004-10-8, Insulin, biological studies

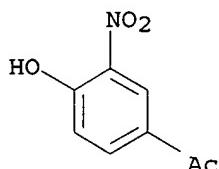
(resistance, treatment; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

IT 6322-56-1, 4-Hydroxy-3-nitroacetophenone

(precursor; preparation of piperidine hydroxyaminopropyl ether and hydroxyethylamine derivs. as β_3 adrenergic receptor agonists, antidiabetics, and antiobesity agents)

RN 6322-56-1 USPATFULL

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 33 OF 101 USPATFULL on STN

DUPLICATE 6

ACCESSION NUMBER:

2002:48640 USPATFULL

TITLE:

Heterocyclic beta-3 adrenergic receptor agonists

INVENTOR(S):

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Molinari, Albert J., Princeton, NJ, UNITED STATES

PATENT ASSIGNEE(S):

American Home Products Corporation, Madison, NJ, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
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PATENT INFORMATION: US 2002028832 A1 20020307 <--

US 6451814 B2 20020917

APPLICATION INFO.:

US 2001-903841 A1 20010712 (9) <--

	NUMBER	DATE
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PRIORITY INFORMATION: US 2000-218628P 20000717 (60) <--

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

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NUMBER OF CLAIMS:

10

EXEMPLARY CLAIM:

1

LINE COUNT: 8770

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides compounds of Formula I having the structure

##STR1##

U, V, W, X, and Y are as defined hereinbefore,

or a pharmaceutically acceptable salt thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenetic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes.

INCL	INCLM: 514/312.000
	INCLS: 514/321.000; 514/326.000; 546/157.000; 546/197.000; 546/196.000
NCL	NCLM: 514/313.000; 514/312.000
	NCLS: 514/312.000; 514/317.000; 514/324.000; 546/156.000; 546/192.000; 546/195.000; 514/321.000; 514/326.000; 546/157.000; 546/196.000; 546/197.000
IC	[7]
	ICM C07D043-02
	ICS A61K031-4709; A61K031-454
	IPCI C07D0043-02 [ICM,7]; A61K0031-4709 [ICS,7]; A61K0031-454 [ICS,7]; A61K0031-4523 [ICS,7,C*]
	IPCI-2 A61K0031-47 [ICM,7]; A61K0031-445 [ICS,7]; C07D0215-16 [ICS,7]; C07D0215-00 [ICS,7,C*]; C07D0211-08 [ICS,7]; C07D0211-06 [ICS,7]; C07D0211-00 [ICS,7,C*]
	IPCR C07D0211-00 [I,A*]; C07D0211-46 [I,A]; C07D0211-54 [I,A]; C07D0211-58 [I,A]; C07D0211-60 [I,A]; C07D0211-62 [I,A]; C07D0211-96 [I,A]; C07D0401-00 [I,C*]; C07D0401-06 [I,A]; C07D0401-12 [I,A]; C07D0409-00 [I,C*]; C07D0409-06 [I,A]; C07D0409-14 [I,A]; C07D0417-00 [I,C*]; C07D0417-04 [I,A]; C07D0417-12 [I,A]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 136:134675 *	WO	0206229 A2 20020124
* CA Indexing for this record included			
CC	27-16 (Heterocyclic Compounds (One Hetero Atom)) Section cross-reference(s): 1, 18, 63		
ST	heterocyclic beta 3 adrenergic receptor agonist prepn activity use; diabetes drug heterocyclic beta 3 adrenergic receptor agonist; atherosclerosis drug heterocyclic beta 3 adrenergic receptor agonist; gastrointestinal disorder drug heterocyclic beta 3 adrenergic receptor agonist; neurogenic inflammation drug heterocyclic beta 3 adrenergic receptor agonist; glaucoma drug heterocyclic beta 3 adrenergic receptor agonist; ocular hypertension drug heterocyclic beta 3 adrenergic receptor agonist; frequent urination drug heterocyclic beta 3 adrenergic receptor agonist; lean meat enhancer heterocyclic beta 3 adrenergic receptor agonist; amino alc urea heterocyclic beta3 adrenergic receptor agonist prepn		
IT	Alcohols, preparation (amino; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)		
IT	Antiarteriosclerotics (antiatherosclerotics; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)		

- IT Drug delivery systems
 (for heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT Drugs
 (gastrointestinal; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Bladder
 (incontinence; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for treatment or inhibition of)
- IT Anti-inflammatory agents
 (neurogenic; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Human
 (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT Heterocyclic compounds
 (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT Antiglaucoma agents
 (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Feed additives
 (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for increasing lean meat to fat ratio)
- IT Adipose tissue
 Growth, animal
 Meat
 (preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful for increasing lean meat to fat ratio in mammals)
- IT Antidiabetic agents
 (type II; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists useful as)
- IT Adrenoceptor agonists
 (β_3 ; preparation of heterocyclic amino alcs. useful as)
- IT 392621-79-3P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide monohydrochloride 392630-65-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid ethyl ester 392632-75-6P, 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxyl]piperidine-4-carboxylic acid ethyl ester 392633-88-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(8-hydroxy-2-oxo-1,2,3,4-tetrahydroquinolin-5-yloxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392637-18-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392637-65-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2-fluoro-4-hydroxybenzylamide 392641-25-7P, 4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxyl]benzoic acid monohydrochloride 392643-18-4P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[4-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide monohydrochloride 392643-58-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzyl ester
 (intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)
- IT 312-32-3P, 1-[(4-Fluorophenyl)sulfonyl]piperidine 403-14-5P, 1-(3-Fluoro-4-hydroxyphenyl)-1-ethanone 463-16-1P, 9-Fluorononanoic acid 1142-07-0P, N-Hexyl-N'-phenylurea 1522-00-5P,

N,N-Diethylsuccinamic acid 3383-72-0P, 1-(2-Chlorcethoxy)-4-nitrobenzene 3510-68-7P 18436-62-9P, 1-(2,2-Dimethoxyethyl)-4-nitrobenzene 19786-48-2P, Methyl 2-(4-nitrophenoxy)acetate 21572-58-7P, N-Ethyl-N'-(4-hydroxyphenyl)urea 25437-95-0P, Ethyl 4-(4-oxo-1-piperidinyl)benzoate 29650-44-0P, 2-Fluorophenyl acetate 34583-53-4P, N-Octyl-N'-phenylurea 34957-73-8P, Methyl 9-hydroxynonanoate 51767-39-6P, N-(4-Hydroxyphenyl)methanesulfonamide 59430-56-7P, 5,8-Dihydroxy-3,4-dihydro-2(1H)-quinolinone 59826-16-3P, 8-(Benzylxy)-5-hydroxy-3,4-dihydro-2(1H)-quinolinone 59954-04-0P, Methyl 2-(4-aminophenoxy)acetate 60814-16-6P, 2-(4-Nitrophenoxy)-1-ethanamine 64318-28-1P, tert-Butyl 4-hydroxyphenethylcarbamate 72370-19-5P, 2-(Benzylxy)-5-(2-bromoacetyl)benzamide 79421-38-8P, Ethyl 4-(1,4-dioxa-8-azaspiro[4.5]dec-8-yl)benzoate 81840-59-7P, (2S)-2-[(2-Allylphenoxy)methyl]oxirane 94838-59-2P, [2-(4-Aminophenyl)ethyl]carbamic acid tert-butyl ester 104605-98-3P, (2S)-2-[(4-Fluorophenoxy)methyl]oxirane 108534-48-1P, (4-tert-Butyldiphenylsilyloxy)phenol 122797-04-0P, (2S)-2-[(4-Benzylxyphenoxy)methyl]oxirane 132059-11-1P, 2-Nitro-6-[(2S)-oxiranylmethoxy]aniline 144226-16-4P, N-(tert-Butoxycarbonyl)-4-nitrophenethylamine 150125-47-6P, 2-(Benzylxy)-5-(2-oxiranyl)benzamide 157187-49-0P, N-[4-(Benzylxy)phenyl]methanesulfonamide 159184-13-1P, 1-(2-Azidoethoxy)-4-nitrobenzene 159184-14-2P, tert-Butyl 2-(4-nitrophenoxy)ethylcarbamate 159184-15-3P, tert-Butyl 2-(4-aminophenoxy)ethylcarbamate 173901-02-5P, 4-[(Hexylamino)carbonyl]amino]benzenesulfonyl chloride 197248-09-2P, 3-[(tert-Butyldiphenylsilyl)oxy]phenol 197774-51-9P, 4-[(2S)-Oxiranylmethoxy]-1,3-dihydro-2H-benzimidazol-2-one 199461-14-8P, N-(4-Fluorophenyl)succinamic acid 211917-94-1P, N-[3-(Benzylxy)phenyl]methanesulfonamide 211917-95-2P, tert-Butyl 3-(benzylxy)phenyl(methylsulfonyl)carbamate 211917-96-3P, tert-Butyl 3-hydroxyphenyl(methylsulfonyl)carbamate 211917-97-4P, tert-Butyl methylsulfonyl[3-[(2S)-oxiranylmethoxy]phenyl]carbamate 329977-83-5P, 5-[(2S)-Oxiranylmethoxy]-1,3-benzodioxole 373359-46-7P, 8-(Benzylxy)-5-[(2S)-oxiranylmethoxy]-3,4-dihydro-2(1H)-quinolinone 391671-77-5P, S-[4-[2-[(tert-Butoxycarbonyl)amino]ethyl]phenyl] O-ethyl carbonodithioate 391671-97-9P, Triisopropyl[2-methyl-4-((2S)-oxiranylmethoxy)phenoxy]silane 391674-00-3P, tert-Butyl(4-oxiranylmethoxyphenoxy)diphenylsilane 391674-01-4P, (4-Benzylxyphenoxy)tert-butyldiphenylsilane 391935-15-2P, 8-[4-(1-Piperidinylsulfonyl)phenyl]-1,4-dioxa-8-azaspiro[4.5]decane 391935-91-4P, 1-[4-(1-Piperidinylsulfonyl)phenyl]-4-piperidinone 392619-82-8P, Methyl 2-hydroxy-5-[(2S)-(oxiranylmethoxy)benzoate 392620-18-7P, 2-(Benzylxy)-5-(2-bromo-1-hydroxyethyl)benzamide 392620-22-3P, N-Ethyl-N'-(4-(2S)-oxiranylmethoxy)phenyl]urea 392620-27-8P, N-[4-(Benzylxy)phenyl]-N'-ethylurea 392620-41-6P, N-[4-(2S)-Oxiranylmethoxy]phenyl]methanesulfonamide 392620-53-0P, tert-Butyl 2-[(tert-butyldiphenylsilyl)oxy]-5-[(2S)-oxiranylmethoxy]phenyl(methylsulfonyl)carbamate 392620-57-4P, 4-(tert-Butyldiphenylsilyloxy)-3-nitroacetophenone 392620-63-2P, Acetic acid 3-nitro-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-67-6P, Acetic acid 3-amino-4-(tert-butyldiphenylsilyloxy)phenyl ester 392620-72-3P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-[(methylsulfonyl)amino]phenyl acetate 392620-76-7P, 3-[(tert-Butoxycarbonyl)(methylsulfonyl)amino]-4-[(tert-butyldiphenylsilyl)oxy]phenyl acetate 392620-81-4P, tert-Butyl 2-[(tert-butyldiphenylsilyl)oxy]-5-hydroxyphenyl(methylsulfonyl)carbamate 392620-88-1P, N-[3-(2S)-Oxiranylmethoxy]phenyl]acetamide 392621-01-1P,

tert-Butyl[2-fluoro-4-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane
392621-05-5P, 1-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl]-1-ethanone
392621-09-9P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenyl acetate
392621-13-5P, 4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenol
392621-17-9P, 5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone O-[(2S)-oxiranylmethyl]oxime 392621-20-4P,
5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone
392621-24-8P, 5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenone oxime 392621-47-5P, tert-Butyl[3-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane 392621-50-0P,
2-[(E)-2-(4-Nitrophenyl)diazetyl]-5-[(2S)-oxiranylmethoxy]pyridine
392621-53-3P, 6-[(E)-2-(4-Nitrophenyl)diazetyl]-3-pyridinol
392621-56-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorobenzaldehyde
392621-60-2P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenyl formate
392621-64-6P, 4-[(tert-Butyldiphenylsilyl)oxy]-2-chlorophenol
392621-68-0P, tert-Butyl(diphenyl)silyl 3-chloro-4-[(2S)-oxiranylmethoxy]phenyl ether 392621-86-2P, tert-Butyl 4-[(1-benzyl-4-piperidinyl)amino]phenethylcarbamate 392621-90-8P,
[2-[4-(Piperidin-4-ylamino)phenyl]ethyl]carbamic acid tert-butyl ester
392621-94-2P, tert-Butyl 4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392621-98-6P, 4-[4-(2-Aminoethyl)anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide formate
392622-02-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392622-08-1P, tert-Butyl 4-[[1-(cyclohexylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate
392622-13-8P, 4-[4-(2-Aminoethyl)anilino]-N-cyclohexyl-1-piperidinecarboxamide formate 392622-17-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-cyclohexyl-1-piperidinecarboxamide 392622-25-2P, [2-[4-[1-(Octylcarbamoyl)piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392622-29-6P, 4-[4-(2-Aminoethyl)anilino]-N-octyl-1-piperidinecarboxamide formate 392622-43-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-[[2-[(E)-2-(4-nitrophenyl)diazetyl]-4-pyridinyl]oxy]propyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-54-7P, tert-Butyl 4-[[1-[(3-methoxyphenethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392622-59-2P, 4-[4-(2-Aminoethyl)anilino]-N-(3-methoxyphenethyl)-1-piperidinecarboxamide formate 392622-63-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-methoxyphenethyl)-1-piperidinecarboxamide 392622-69-4P,
4-[4-[2-[(2-[(Aminocarbonyl)-4-(benzyloxy)phenyl]-2-hydroxyethyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-77-4P, tert-Butyl 4-[acetyl(1-benzyl-4-piperidinyl)amino]phenethylcarbamate 392622-82-1P, tert-Butyl 4-[acetyl(4-piperidinyl)amino]phenethylcarbamate 392622-86-5P,
tert-Butyl 4-[acetyl[1-[(octylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392622-90-1P, 4-[4-[2-[(2S)-3-[4-(Benzyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392622-97-8P, tert-Butyl 4-[[1-(methylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-02-8P, 4-[N-Acetyl-4-(2-aminoethyl)anilino]-N-octyl-1-piperidinecarboxamide formate 392623-07-3P, 4-[4-(2-Aminoethyl)anilino]-N-methyl-1-piperidinecarboxamide formate 392623-10-8P,
4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-methyl-1-piperidinecarboxamide 392623-29-9P, tert-Butyl 4-[[1-(ethylamino)carbonyl]-4-

piperidinyl]amino]phenethylcarbamate 392623-33-5P, 4-[4-(2-Aminoethyl)anilino]-N-ethyl-1-piperidinecarboxamide 392623-37-9P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-ethyl-1-piperidinecarboxamide 392623-50-6P, tert-Butyl 4-[1-[(isopropylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-55-1P, 4-[4-(2-Aminoethyl)anilino]-N-isopropyl-1-piperidinecarboxamide formate 392623-59-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-isopropyl-1-piperidinecarboxamide 392623-67-5P, tert-Butyl 4-[1-[(3-cyclopentylpropyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-71-1P, 4-[4-(2-Aminoethyl)anilino]-N-(3-cyclopentylpropyl)-1-piperidinecarboxamide formate 392623-76-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-cyclopentylpropyl)-1-piperidinecarboxamide formate 392623-84-6P, tert-Butyl 4-[1-[(2,2,2-trifluoroethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392623-89-1P, 4-[4-(2-Aminoethyl)anilino]-N-(2,2,2-trifluoroethyl)-1-piperidinecarboxamide formate 392623-93-7P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,2,2-trifluoroethyl)-1-piperidinecarboxamide 392624-01-0P, tert-Butyl 4-[1-[(diethylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-05-4P, 4-[4-(2-Aminoethyl)anilino]-N,N-diethyl-1-piperidinecarboxamide 392624-09-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N,N-diethyl-1-piperidinecarboxamide 392624-14-5P, 4-[4-(2-Aminoethyl)anilino]-N,N-diethyl-1-piperidinecarboxamide formate 392624-21-4P, tert-Butyl 4-[1-[(4-fluorophenethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-26-9P, 4-[4-(2-Aminoethyl)anilino]-N-(4-fluorophenethyl)-1-piperidinecarboxamide formate 392624-30-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(4-fluorophenethyl)-1-piperidinecarboxamide 392624-36-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-chlorophenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392624-44-1P, tert-Butyl 4-[1-[(4-[3-(cyclopentyloxy)-4-methoxyphenyl]-1-piperidinyl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-49-6P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl][4-[3-(cyclopentyloxy)-4-methoxyphenyl]-1-piperidinyl]methanone formate 392624-53-2P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl][4-[3-(cyclopentyloxy)-4-methoxyphenyl]-1-piperidinyl]methanone 392624-61-2P, tert-Butyl 4-[1-[(1,1,3,3-tetramethylbutyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-65-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392624-76-9P, tert-Butyl 4-[1-[(2,4-dichlorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-81-6P, 4-[4-(2-Aminoethyl)anilino]-N-(2,4-dichlorobenzyl)-1-piperidinecarboxamide formate 392624-85-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,4-dichlorobenzyl)-1-piperidinecarboxamide 392624-93-0P, tert-Butyl 4-[1-[(3,4-dichlorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392624-99-6P, 4-[4-(2-Aminoethyl)anilino]-N-(3,4-dichlorobenzyl)-1-piperidinecarboxamide formate 392625-02-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,3-dichlorobenzyl)-1-piperidinecarboxamide 392625-17-1P, tert-Butyl

4-[[1-[[3-(2-thienyl)propyl]amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392625-23-9P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(2-thienyl)propyl]-1-piperidinecarboxamide formate 392625-28-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(2-thienyl)propyl]-1-piperidinecarboxamide 392625-37-5P, tert-Butyl 4-[[1-[[3,5-difluorobenzyl]amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392625-42-2P, 4-[4-(2-Aminoethyl)anilino]-N-(3,5-difluorobenzyl)-1-piperidinecarboxamide formate 392625-46-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3,5-difluorobenzyl)-1-piperidinecarboxamide 392625-63-7P, tert-Butyl 4-[[1-[(2,3-dimethoxybenzyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392625-68-2P, 4-[4-(2-Aminoethyl)anilino]-N-(2,3-dimethoxybenzyl)-1-piperidinecarboxamide formate 392625-72-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,3-dimethoxybenzyl)-1-piperidinecarboxamide 392625-83-1P, tert-Butyl 4-[[1-[(2-fluorobenzyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392625-88-6P, 4-[4-(2-Aminoethyl)anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide 392625-89-7P, 4-[4-(2-Aminoethyl)anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide formate 392625-93-3P, tert-Butyl 4-[[1-[(2-fluorobenzyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate formate 392625-97-7P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2-fluorobenzyl)-1-piperidinecarboxamide 392626-08-3P, tert-Butyl 4-[[1-[(3-fluorobenzyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392626-13-0P, 4-[4-(2-Aminoethyl)anilino]-N-(3-fluorobenzyl)-1-piperidinecarboxamide formate 392626-17-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-fluorobenzyl)-1-piperidinecarboxamide 392626-24-3P, tert-Butyl 4-[[1-[[3-(4-methylphenyl)-3-oxopropyl]amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392626-28-7P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide 392626-29-8P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide formate 392626-33-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-methylphenyl)-3-oxopropyl]-1-piperidinecarboxamide 392626-44-7P, tert-Butyl 4-[[1-[[3-(4-methylphenyl)propyl]amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392626-49-2P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-methylphenyl)propyl]-1-piperidinecarboxamide formate 392626-53-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-methylphenyl)propyl]-1-piperidinecarboxamide 392626-61-8P, tert-Butyl 4-[[1-[(4-ethylphenethyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392626-68-5P, 4-[4-(2-Aminoethyl)anilino]-N-(4-ethylphenethyl)-1-piperidinecarboxamide formate 392626-71-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(4-ethylphenethyl)-1-piperidinecarboxamide 392626-78-7P, tert-Butyl 4-[[1-[(2,2-diphenylethyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate 392626-83-4P, 4-[4-(2-Aminoethyl)anilino]-N-(2,2-diphenylethyl)-1-piperidinecarboxamide formate 392626-87-8P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,2-diphenylethyl)-1-piperidinecarboxamide 392626-93-6P, tert-Butyl 4-[[1-[(2,6-difluorobenzyl)amino]carbonyl]-4-piperidinyl]aminophenethylcarbamate

392626-99-2P, 4-[4-(2-Aminoethyl)anilino]-N-(2,6-difluorobenzyl)-1-piperidinecarboxamide formate 392627-02-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,6-difluorobenzyl)-1-piperidinecarboxamide 392627-10-0P, tert-Butyl 4-[[1-[[2-(trifluoromethyl)benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-15-5P, 4-[4-(2-Aminoethyl)anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide formate 392627-19-9P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide 392627-20-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide 392627-30-4P, 4-(1H-Pyrazol-1-yl)-2-(trifluoromethyl)benzonitrile 392627-34-8P, 4-(1H-Pyrazol-1-yl)-2-(trifluoromethyl)benzylamine 392627-39-3P, tert-Butyl 4-[[1-[[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-44-0P, 4-[4-(2-Aminoethyl)anilino]-N-[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide formate 392627-49-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[4-(1H-pyrazol-1-yl)-2-(trifluoromethyl)benzyl]-1-piperidinecarboxamide 392627-57-5P, tert-Butyl 4-[[1-[(isopentylamino)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-62-2P, 4-[4-(2-Aminoethyl)anilino]-N-isopentyl-1-piperidinecarboxamide formate 392627-67-7P

, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-isopentyl-1-piperidinecarboxamide 392627-86-0P, tert-Butyl 4-[[1-[(2,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392627-90-6P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide 392627-95-1P, 4-[4-(2-Aminoethyl)anilino]-N-(2,5-difluorobenzyl)-1-piperidinecarboxamide formate 392628-03-4P, Methyl 5-[[2S)-3-[[4-[[1-[(2,5-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethyl]amino]-2-hydroxypropyl]oxy]-2-hydroxybenzoate 392628-14-7P, tert-Butyl 2-[4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenoxy]ethylcarbamate 392628-18-1P, tert-Butyl 2-[4-(4-piperidinylamino)phenoxy]ethylcarbamate 392628-22-7P, 4-[4-(2-Aminoethoxy)anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392628-26-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethoxy]anilino]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392628-39-6P, 4-Hydroxy-N-phenyl-1-piperidinecarboxamide 392628-44-3P, 4-Bromo-N-phenyl-1-piperidinecarboxamide 392628-48-7P, tert-Butyl 4-[[1-(anilinocarbonyl)-4-piperidinyl]sulfanyl]phenethylcarbamate 392628-53-4P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-phenyl-1-piperidinecarboxamide 392628-57-8P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-phenyl-1-piperidinecarboxamide 392628-69-2P, N-Hexyl-4-hydroxy-1-piperidinecarboxamide 392628-74-9P, 4-Bromo-N-hexyl-1-piperidinecarboxamide 392628-78-3P, tert-Butyl 4-[[1-(hexylamino)carbonyl]-4-piperidinyl]sulfanyl]phenethylcarbamate 392628-83-0P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-hexyl-1-piperidinecarboxamide 392628-87-4P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-hexyl-1-piperidinecarboxamide 392629-02-6P, 4-Bromo-N-(4-Fluorobenzyl)-4-hydroxy-1-piperidinecarboxamide 392629-97-6P, N-(4-Fluorobenzyl)-4-

fluorobenzyl)-1-piperidinecarboxamide 392629-07-1P, tert-Butyl
4-[[1-(4-fluorobenzylaminocarbonyl)-4-piperidinyl]sulfanyl]phenethylcarba-
mate 392629-11-7P, 4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-(4-
fluorobenzylamino)-1-piperidinecarboxamide 392629-15-1P,
4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-
hydroxypropyl]amino]ethyl]phenyl]sulfanyl]-N-(4-fluorobenzyl)-1-
piperidinecarboxamide 392629-24-2P, 4-Hydroxy-N-[(1-
phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392629-29-7P,
4-Bromo-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide
392629-33-3P, tert-Butyl 4-[[1-[[[(1-phenylcyclopentyl)methyl]amino]carbo-
nyle]-4-piperidinyl]sulfanyl]phenethylcarbamate 392629-38-8P,
4-[[4-(2-Aminoethyl)phenyl]sulfanyl]-N-[(1-phenylcyclopentyl)methyl]-1-
piperidinecarboxamide 392629-42-4P, 4-[[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfan-
yl]-N-[(1-phenylcyclopentyl)methyl]-1-piperidinecarboxamide
392629-50-4P, tert-Butyl 4-[[1-[(hexylamino)carbonyl]-4-
piperidinyl]sulfonyl]phenethylcarbamate 392629-55-9P,
[4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-1-piperidinyl](3-methyl-2-
thienyl)methanone 392629-60-6P, 4-[[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-hexyl-1-piperidinecarboxamide 392629-75-3P, tert-Butyl
4-[[1-(4-fluorobenzylaminocarbonyl)-4-piperidinyl]sulfonyl]phenethylcarba-
mate 392629-80-0P, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-(4-
fluorobenzylamino)-1-piperidinecarboxamide 392629-85-5P,
4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-
hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-(4-fluorobenzyl)-1-
piperidinecarboxamide 392629-94-6P, tert-Butyl 4-[[1-[(1-
phenylcyclopentyl)methyl]amino]carbonyl]-4-piperidinyl]sulfonyl]phenethyl
carbamate 392629-99-1P, 4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-[(1-
phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392630-05-6P,
4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-
hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-[(1-
phenylcyclopentyl)methyl]-1-piperidinecarboxamide 392630-16-9P,
4-Hydroxy-N-octyl-1-piperidinecarboxamide 392630-21-6P,
4-Bromo-N-octyl-1-piperidinecarboxamide 392630-26-1P, tert-Butyl
4-[[1-[(octylamino)carbonyl]-4-piperidinyl]sulfanyl]phenethylcarbamate
392630-30-7P, tert-Butyl 4-[[1-[(octylamino)carbonyl]-4-
piperidinyl]sulfonyl]phenethylcarbamate 392630-35-2P,
4-[[4-(2-Aminoethyl)phenyl]sulfonyl]-N-octyl-1-piperidinecarboxamide
392630-39-6P, 4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-
2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-N-octyl-1-
piperidinecarboxamide 392630-48-7P, 4-[[4-[2-[(2S)-2-Hydroxy-3-[3-
methyl-4-[(triisopropylsilyl)oxy]phenoxy]propyl]amino]ethyl]phenyl]sulfonyl]-
N-octyl-1-piperidinecarboxamide 392630-61-4P, tert-Butyl
2-[(tert-butyldiphenylsilyl)oxy]-5-[(2S)-3-[[4-[[1-[(2,5-
difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethyl]amino]-2-
hydroxypropyl]oxy]phenyl(methylsulfonyl)carbamate 392630-73-8P,
4-(2,2-Dimethoxyethyl)aniline 392630-77-2P, 1-Benzyl-N-[(2,2-
dimethoxyethyl)phenyl]-4-piperidinamine 392630-81-8P,
N-[(4-(2,2-Dimethoxyethyl)phenyl)-N-(4-piperidinyl)amine 392630-85-2P,
1-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylcarbonyl)piperidine-4-carboxylic acid
ethyl ester 392630-89-6P, Ethyl 1-[(4-oxo-1-piperidinyl)carbonyl]-4-
piperidinecarboxylate 392630-94-3P, 4-[[1-[(4-[4-(2,2-
Dimethoxyethyl)anilino]-1-piperidinyl)carbonyl]]piperidinecarboxylic acid
ethyl ester 392631-11-7P, 4-[[4-[2-[(2S)-3-[4-[(tert-
Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-
octyl-1-piperidinecarboxamide 392631-24-2P, tert-Butyl

4-[[1-[(octylamino)carbonyl]-4-piperidinyl]oxy]phenethylcarbamate
 392631-28-6P, 4-[4-(2-Aminoethyl)phenoxy]-N-octyl-1-piperidinecarboxamide
 392631-33-3P, 4-[4-[2-[(2S)-3-[4-(Benzyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenoxy]-N-octyl-1-piperidinecarboxamide
 392631-46-8P, Methyl 9-fluorononanoate 392631-51-5P, tert-Butyl 4-[[1-[(8-fluoroctyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392631-60-6P, 4-[4-(2-Aminoethyl)anilino]-N-(8-fluoroctyl)-1-piperidinecarboxamide 392631-65-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(8-fluoroctyl)-1-piperidinecarboxamide
 (intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392631-75-3P, tert-Butyl 4-[[1-[(4-fluorobenzyl)amino]carbonyl]-4-piperidinyl]oxy]phenethylcarbamate 392631-80-0P, 4-[4-(2-Aminoethyl)phenoxy]-N-(4-fluorobenzyl)-1-piperidinecarboxamide
 392631-84-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenoxy]-N-(4-fluorobenzyl)-1-piperidinecarboxamide 392632-03-0P, tert-Butyl 4-[[1-[[4-(3,4-dimethoxyphenyl)butyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392632-11-0P, 4-[4-(2-Aminoethyl)anilino]-N-[4-(3,4-dimethoxyphenyl)butyl]-1-piperidinecarboxamide 392632-16-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[4-(3,4-dimethoxyphenyl)butyl]-1-piperidinecarboxamide 392632-31-4P, Methyl 2-[4-[[4-[(2-[(tert-butoxycarbonyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-37-0P, Methyl 2-[4-[[4-[(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate formate 392632-41-6P, Methyl 2-[4-[[4-[(4-[2-[(2S)-2-hydroxy-3-[4-[(isopropyldiphenylsilyl)oxy]phenoxy]propyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-45-0P, Methyl 2-[4-[[4-[(4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]phenoxy]acetate 392632-54-1P, 4-[4-[2-[(2R)-2-[4-(Benzyl)oxy]-3-[(methylsulfonyl)amino]phenyl]-2-[(triethylsilyl)oxy]ethyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392632-62-1P, 4-[4-[2-[(2R)-2-(4-Benzyl)oxy-3-methanesulfonylaminophenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392632-79-0P, Ethyl 1-[[4-[4-[2-[(tert-butoxycarbonyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate 392632-85-8P, Ethyl 1-[[4-[4-(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate formate 392632-91-6P, Ethyl 1-[[4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]-4-piperidinecarboxylate 392633-10-2P, 4-[4-[2-[(2S)-3-[[5-[(tert-Butyldimethylsilyl)oxy]-3,4-dihydro-1(2H)-naphthalenylidene]amino]oxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392633-18-0P, N-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]-3-fluorophenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]-N'-octylurea 392633-27-1P, 4-[4-[2-[(2S)-3-[4-(Benzyl)oxy]-3-[(methylsulfonyl)amino]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392633-38-4P, 2-[4-[[4-[(hexylamino)carbonyl]amino]phenyl]acetic acid 392633-46-4P, tert-Butyl 4-[[1-[[4-[(hexylamino)carbonyl]amino]benzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392633-52-2P, 4-[4-(2-Aminoethyl)anilino]-N-[4-[(hexylamino)carbonyl]amino]benzyl]-1-piperidinecarboxamide formate 392633-55-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[4-[(hexylamino)carbonyl]amino]benzyl]-1-piperidinecarboxamide

392633-64-6P, tert-Butyl 4-[[1-[[3-cyclohexylpropyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392633-74-8P, 4-[4-(2-Aminoethyl)anilino]-N-(3-cyclohexylpropyl)-1-piperidinecarboxamide formate 392633-79-3P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-cyclohexylpropyl)-1-piperidinecarboxamide 392633-84-0P, tert-Butyl 4-[[1-[[3-cyclohexylpropyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate formate 392633-92-0P, 4-[4-[2-[(2S)-3-[[8-(Benzyl)oxy]-2-oxo-1,2,3,4-tetrahydro-5-quinolinyl]oxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinecarboxamide 392634-00-3P, tert-Butyl 4-[[1-[(cyclopentylmethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392634-05-8P, 4-[4-(2-Aminoethyl)anilino]-N-(cyclopentylmethyl)-1-piperidinecarboxamide formate 392634-10-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(cyclopentylmethyl)-1-piperidinecarboxamide 392634-18-3P, tert-Butyl 4-[[1-[[2-methoxy-4-(3-phenoxypropoxy)phenethyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392634-27-4P, 4-[4-(2-Aminoethyl)anilino]-N-[2-methoxy-4-(3-phenoxypropoxy)phenethyl]-1-piperidinecarboxamide formate 392634-31-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[2-methoxy-4-(3-phenoxypropoxy)phenethyl]-1-piperidinecarboxamide 392634-50-3P, tert-Butyl 2-[4-[(1-benzyl-4-piperidinyl)amino]phenoxy]ethylcarbamate 392634-55-8P, tert-Butyl 2-[4-[[1-[(octylamino)carbonyl]-4-piperidinyl]amino]phenoxy]ethylcarbamate 392634-61-6P, 4-[4-(2-Aminoethoxy)anilino]-N-octyl-1-piperidinecarboxamide formate 392634-67-2P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethoxy]anilino]-N-octyl-1-piperidinecarboxamide 392634-74-1P, Methyl 3-[4-[(dimethylamino)carbonyl]oxy]phenylpropanoate 392634-78-5P, 3-[4-[(Dimethylamino)carbonyl]oxy]phenylpropanoic acid 392634-82-1P, 4-[2-[[4-[4-[2-[(tert-Butoxycarbonyl)amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate 392634-86-5P, 4-[2-[[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate formate 392634-90-1P, 4-[2-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]ethyl]phenyl dimethylcarbamate 392635-03-9P, N-(2,5-Difluorobenzyl)-4-[4-(2,2-dimethoxyethyl)anilino]-1-piperidinecarboxamide 392635-17-5P, Methyl (2S)-1-(1,4-dioxa-8-azaspiro[4.5]dec-8-ylcarbonyl)-2-pyrrolidinecarboxylate 392635-25-5P, Methyl (2S)-1-[(4-oxo-1-piperidinyl)carbonyl]-2-pyrrolidinecarboxylate 392635-30-2P, Methyl (2S)-1-[[4-[4-(2,2-dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]-2-pyrrolidinecarboxylate 392635-40-4P, Ethyl 1-(1,4-dioxa-8-azaspiro[4.5]dec-8-ylcarbonyl)-3-piperidinecarboxylate 392635-44-8P, Ethyl 1-[(4-oxo-1-piperidinyl)carbonyl]-3-piperidinecarboxylate 392635-49-3P, Ethyl 1-[[4-[4-(2,2-dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]-3-piperidinecarboxylate 392635-58-4P, tert-Butyl 4-[[1-[[3-methoxybenzyl]amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392635-63-1P, 4-[4-(2-Aminoethyl)anilino]-N-(3-methoxybenzyl)-1-piperidinecarboxamide 392635-67-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-methoxybenzyl)-1-piperidinecarboxamide 392635-75-5P, tert-Butyl 4-[[1-[(2,4-difluorobenzyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392636-00-9P, 4-[4-(2-Aminoethyl)anilino]-N-(2,4-difluorobenzyl)-1-piperidinecarboxamide formate 392636-05-4P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-

(2,4-difluorobenzyl)-1-piperidinecarboxamide 392636-17-8P,
[2-[4-[1-[2-(4-Fluorophenylcarbamoyl)ethylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-23-6P,
4-[4-(2-Aminoethyl)anilino]-N-[3-(4-fluoroanilino)-3-oxopropyl]-1-piperidinecarboxamide formate 392636-27-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-fluoroanilino)-3-oxopropyl]-1-piperidinecarboxamide 392636-35-0P,
N-(4-Chlorophenyl)-N-methylsuccinamic acid 392636-41-8P,
[2-[4-[1-[2-[(4-Chlorophenyl)methylcarbamoyl]ethylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-48-5P,
4-[4-(2-Aminoethyl)anilino]-N-[3-[4-chloro(methyl)anilino]-3-oxopropyl]-1-piperidinecarboxamide formate 392636-52-1P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-[4-chloro(methyl)anilino]-3-oxopropyl]-1-piperidinecarboxamide 392636-61-2P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzonitrile 392636-65-6P, 4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylamine 392636-69-0P, [2-[4-[1-[4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392636-73-6P, N-[4-[(tert-Butyldiphenylsilyl)oxy]-2-fluorobenzyl]-4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392636-87-2P, [4-(tert-Butyldiphenylsilyloxy)-2-fluorobenzyl]carbamic acid tert-butyl ester 392636-92-9P, (2-Fluoro-4-hydroxybenzyl)carbamic acid tert-butyl ester 392636-96-3P, tert-Butyl 4-[[1-(dimethylamino)vinyl]oxy]methyl]-2-fluorobenzylcarbamate 392637-02-4P, 1-[[4-(Aminomethyl)-3-fluorobenzyl]oxy]-N,N-dimethyl-1-ethylenamine formate 392637-06-8P, [2-[4-[1-(4-Dimethylcarbamoyloxy)-2-fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392637-11-5P, 4-[[[[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenyl dimethylcarbamate formate 392637-15-9P, 4-[[[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenyl dimethylcarbamate 392637-21-7P, N-(4-Fluorobenzyl)-4-[4-[2-[(2S)-2-hydroxy-3-[3-[(isopropyldiphenylsilyl)oxy]phenoxy]propyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392637-33-1P, [4-(tert-Butoxycarbonylaminomethyl)-3-fluorophenoxy]acetic acid methyl ester 392637-38-6P, Methyl 2-[4-(aminomethyl)-3-fluorophenoxy]acetate 392637-43-3P, 4-[[4-[4-(2-tert-Butoxycarbonylaminooethyl)phenylamino]piperidine-1-carbonyl]amino]-3-fluorophenoxyacetic acid methyl ester 392637-51-3P, Methyl 2-[4-[[4-[4-(2-aminoethyl)anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenoxyacetate 392637-57-9P, Methyl 2-[4-[[4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]-3-fluorophenoxyacetate 392637-61-5P, Methyl 2-[3-fluoro-4-[[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]amino]methyl]phenoxyacetate 392637-70-6P, N-[4-[(tert-Butyldiphenylsilyl)oxy]benzyl]-4-[4-[2-[(2S)-2-hydroxy-3-[3-[(isopropyldiphenylsilyl)oxy]phenoxy]propyl]amino]ethyl]anilino]-1-piperidinecarboxamide 392637-87-5P, tert-Butyl 4-[[1-[(3-fluorophenethyl)amino]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392637-91-1P, 4-[4-(2-Aminoethyl)anilino]-N-(3-fluorophenethyl)-1-piperidinecarboxamide 392637-95-5P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-(3-fluorophenethyl)-1-piperidinecarboxamide 392638-03-8P, [2-[4-[1-(2-Diethylcarbamoylethylcarbamoyl)piperidin-4-

ylaminophenyl]ethyl]carbamic acid tert-butyl ester 392638-09-4P,
4-[4-(2-Aminoethyl)anilino]-N-[3-(dimethylamino)-3-oxopropyl]-1-piperidinecarboxamide formate 392638-13-0P, 4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(dimethylamino)-3-oxopropyl]-1-piperidinecarboxamide 392638-24-3P
392638-29-8P, 4-[4-(2-Aminoethyl)anilino]-N-[3-(4-morpholinyl)-3-oxopropyl]-1-piperidinecarboxamide formate 392638-36-7P,
4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-N-[3-(4-morpholinyl)-3-oxopropyl]-1-piperidinecarboxamide 392638-45-8P, tert-Butyl 4-[[1-(1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392638-52-7P,
[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-2-yl)methanone formate 392638-56-1P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](1H-indol-2-yl)methanone 392638-69-6P, Ethyl 1-[(octylamino)carbonyl]-4-piperidinecarboxylate 392638-74-3P,
1-[(Octylamino)carbonyl]-4-piperidinecarboxylic acid 392638-79-8P,
tert-Butyl 4-[[1-[[1-[(octylamino)carbonyl]-4-piperidinyl]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392638-86-7P, 4-[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]-N-octyl-1-piperidinecarboxamide formate 392638-91-4P, 4-[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]-N-octyl-1-piperidinecarboxamide 392639-03-1P, tert-Butyl 4-[[1-4-[(hexylamino)carbonyl]amino]benzoyl]-4-piperidinyl]amino]phenethylcarbamate 392639-11-1P, N-[4-[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl]carbonyl]phenyl]-N'-hexylurea 392639-17-7P, N-[4-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]phenyl]-N'-hexylurea 392639-27-9P, tert-Butyl 4-[[1-[(5-methoxy-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-32-6P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](5-methoxy-1H-indol-2-yl)methanone formate 392639-36-0P,
[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](5-methoxy-1H-indol-2-yl)methanone 392639-45-1P, tert-Butyl 4-[[1-[(7-nitro-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-53-1P,
[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone 392639-58-6P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone 392639-63-3P,
[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](7-nitro-1H-indol-2-yl)methanone formate 392639-71-3P, tert-Butyl 4-[[1-[(5-bromo-1H-indol-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-76-8P,
[4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](5-bromo-1H-indol-2-yl)methanone 392639-80-4P, (5-Bromo-1H-indol-2-yl)[4-[4-[2-[(2S)-3-[4-[(tert-butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]methanone 392639-90-6P, tert-Butyl 4-[[1-[(3-methoxy-1-benzothiophen-2-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392639-99-5P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](3-methoxy-1-benzothiophen-2-yl)methanone 392640-04-9P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl](3-methoxy-1-benzothiophen-2-yl)methanone 392640-19-6P,
tert-Butyl 4-[[1-(1H-indol-3-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392640-23-2P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl](1H-indol-3-yl)methanone 392640-27-6P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-

piperidinyl] (1H-indol-3-yl)methanone 392640-35-6P, tert-Butyl
 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392640-40-3P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl] (3-methyl-2-thienyl)methanone 392640-46-9P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl] (3-methyl-2-thienyl)methanone 392640-59-4P, tert-Butyl
 4-[[1-(1H-indazol-3-yl)carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392640-63-0P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl] (1H-indazol-3-yl)methanone 392640-68-5P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl] (1H-indazol-3-yl)methanone 392640-78-7P, tert-Butyl
 4-[(1-hexanoyl-4-piperidinyl)amino]phenethylcarbamate 392640-84-5P,
 1-[4-[(4-(2-Aminoethyl)anilino)-1-piperidinyl]-1-hexanone formate 392640-89-0P, 1-[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]-1-hexanone 392640-96-9P, tert-Butyl (2S)-1-[(4-fluorophenyl)sulfonyl]-2-pyrrolidinecarboxylate 392641-04-2P, tert-Butyl 4-[[1-[(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]carbonyl]-4-piperidinyl]amino]phenethylcarbamate 392641-12-2P, [4-[4-(2-Aminoethyl)anilino]-1-piperidinyl] [(2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone formate 392641-17-7P,
 [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl] (2S)-1-[(4-fluorophenyl)sulfonyl]pyrrolidinyl]methanone formate 392641-30-4P,
 Methyl 4-[[4-[(2,2-dimethoxyethyl)anilino]-1-piperidinyl]carbonyl]benzoate 392641-35-9P, Methyl 4-[[4-[4-[2-[(2R)-2-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]anilino]-1-piperidinyl]carbonyl]benzoate 392641-46-2P,
 (4-Hydroxy-1-piperidinyl) (3-methyl-2-thienyl)methanone 392641-50-8P,
 (4-Bromo-1-piperidinyl) (3-methyl-2-thienyl)methanone 392641-55-3P,
 tert-Butyl 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]sulfanyl]phenethylcarbamate 392641-59-7P,
 [4-[(4-(2-Aminoethyl)phenyl)sulfanyl]-1-piperidinyl] (3-methyl-2-thienyl)methanone 392641-64-4P, [4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-1-piperidinyl] (3-methyl-2-thienyl)methanone 392641-73-5P,
 tert-Butyl 4-[[1-[(3-methyl-2-thienyl)carbonyl]-4-piperidinyl]sulfonyl]phenethylcarbamate 392641-77-9P,
 [4-[[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]phenyl]sulfonyl]-1-piperidinyl] (3-methyl-2-thienyl)methanone 392641-86-0P, tert-Butyl 4-[[1-[(4-[(hexylamino)carbonyl]amino)phenyl]sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392641-91-7P, N-[4-[[4-(2-Aminoethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-hexylurea formate 392641-95-1P, N-[4-[[4-[4-[2-[(2S)-3-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-hexylurea 392642-09-0P, tert-Butyl 4-[[1-(octylsulfonyl)-4-piperidinyl]amino]phenethylcarbamate 392642-12-5P, N-[4-(2-Aminoethyl)phenyl]-1-(octylsulfonyl)-4-piperidinamine 392642-16-9P, (2S)-1-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-(octylsulfonyl)-4-piperidinyl]amino]phenethyl]amino]-2-propanol 392642-24-9P, tert-Butyl 4-[[1-[(4-methylphenyl)sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-28-3P, N-[4-(2-Aminoethyl)phenyl]-1-[(4-methylphenyl)sulfonyl]-4-piperidinamine 392642-32-9P
 , (2S)-1-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[[1-[(4-methylphenyl)sulfonyl]-4-piperidinyl]amino]phenethyl]amino]-2-propanol

392642-40-9P, tert-Butyl 4-[1-[(1-methyl-1H-imidazol-4-yl)sulfonyl]-4-piperidinylamino]phenethylcarbamate 392642-44-3P, (2S)-1-[4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[(1-methyl-1H-imidazol-4-yl)sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-52-3P, tert-Butyl 4-[[1-[(4-(acetylamino)phenyl)sulfonyl]-4-piperidinyl]amino]phenethylcarbamate 392642-56-7P, N-[4-[[4-[(2-Aminoethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]acetamide 392642-60-3P, N-[4-[[4-[(2-[(2S)-3-[(4-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-2-hydroxypropyl]amino)ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl]acetamide 392642-67-0P, N-[5-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylsulfonyl)-4-methyl-1,3-thiazol-2-yl]acetamide 392642-71-6P, N-[4-Methyl-5-[(4-oxo-1-piperidinyl)sulfonyl]-1,3-thiazol-2-yl]acetamide 392642-75-0P, N-[5-[[4-[(2,2-Dimethoxyethyl)anilino]-1-piperidinyl]sulfonyl]-4-methyl-1,3-thiazol-2-yl]acetamide 392642-82-9P, 4-[(Octylamino)carbonyl]amino]benzenesulfonyl chloride 392642-86-3P, N-[4-[[4-[(2,2-Dimethoxyethyl)anilino]-1-piperidinyl]sulfonyl]phenyl]-N'-octylurea 392642-94-3P, N-(1,4-Dioxa-8-azaspiro[4.5]dec-8-ylcarbothioyl)benzamide 392642-98-7P, 1,4-Dioxa-8-azaspiro[4.5]decane-8-carbothioamide 392643-02-6P, 1-(4-Phenyl-1,3-thiazol-2-yl)-4-piperidinone 392643-07-1P, tert-Butyl 4-[[1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinyl]amino]phenethylcarbamate formate 392643-14-0P, (2S)-1-[(tert-Butyldiphenylsilyl)oxy]phenoxy]-3-[[4-[(1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinyl)amino]phenethylcarbamate formate 392643-23-1P, N-[4-(2,2-Dimethoxyethyl)phenyl]-1-(4-phenyl-1,3-thiazol-2-yl)-4-piperidinamine 392643-42-4P, N-[4-(2,2-Dimethoxyethyl)phenyl]-1-[(4-(1-piperidinylsulfonyl)phenyl)-4-piperidinamine 392643-54-8P, Ethyl 4-[(4-[(dimethoxymethyl)anilino]-1-piperidinyl]benzoate 392643-63-9P, 4-Fluorobenzyl 4-[(4-[(tert-butoxycarbonyl)amino]ethyl)anilino]-1-piperidinecarboxylate 392643-73-1P, 4-Fluorobenzyl 4-[(4-aminoethyl)anilino]-1-piperidinecarboxylate formate 392643-77-5P, 4-Fluorobenzyl 4-[(4-[(2S)-3-[(4-[(tert-butyldiphenylsilyl)oxy]phenoxy)-2-hydroxypropyl]amino)ethyl]anilino]-1-piperidinecarboxylate 392643-84-4P, 4-[(4-(2-tert-Butoxycarbonylaminoethyl)phenylamino)piperidine-1-carboxylic acid 2,5-difluorobenzyl ester 392643-91-3P, 2,5-Difluorobenzyl 4-[(4-(2-aminoethyl)anilino)-1-piperidinecarboxylate formate 392643-94-6P, 2,5-Difluorobenzyl 4-[(4-[(2S)-3-[(4-[(tert-butyldiphenylsilyl)oxy]phenoxy)-2-hydroxypropyl]amino)ethyl]anilino]-1-piperidinecarboxylate (intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392627-99-5P, 5-[[2S)-3-[[4-[(1-[(2,5-Difluorobenzyl)amino]carbonyl)-4-piperidinyl]amino]phenethyl]amino]-2-hydroxypropyl]oxy]-2-hydroxybenzoic acid

(preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 392622-05-8P, 4-[(4-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino)ethyl]phenylamino)piperidine-1-carboxylic acid cyclohexylamide monohydrochloride 392622-21-8P, 4-[(4-[(2S)-3-(4-Fluorophenoxy)-2-hydroxypropylamino)ethyl]phenylamino)piperidine-1-carboxylic acid octylamide 392622-32-1P, 4-[(4-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropylamino)ethyl]phenylamino)piperidine-1-carboxylic acid octylamide dihydrochloride 392622-39-8P, 4-[(4-[(2S)-3-(6-Aminopyridin-3-yloxy)-2-hydroxypropylamino)ethyl]phenylamino)piperidine-1-carboxylic acid octylamide monohydrochloride 392622-50-3P, 4-[(4-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino)ethyl]phenylamino)piperidine-1-carboxylic acid [2-(3-methoxyphenyl)ethyl]amide monohydrochloride 392622-66-1P, 4-[(4-[(2-[(3-Carbamoyl-4-

hydroxyphenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride 392622-73-0P,
4-[Acetyl[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride
392622-94-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid methylamide monohydrochloride
392623-14-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid ethylamide monohydrochloride
392623-44-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid isopropylamide
monohydrochloride 392623-63-1P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
(3-cyclopentylpropyl)amide monohydrochloride 392623-79-9P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (2,2,2-trifluoroethyl)amide 392624-18-9P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(4-fluorophenyl)ethyl]amide
392624-33-8P, 4-[4-[2-[(2S)-3-(2-Chloro-4-hydroxyphenoxy)-2-hydroxypropyl]amino]ethyl]anilino]-N-octyl-1-piperidinocarboxamide
392624-40-7P, [4-(3-Cyclopentyloxy-4-methoxyphenyl)piperidin-1-yl]-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone 392624-57-6P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid amide 392624-68-9P, 4-[4-[2-[(2S)-3-[4-(3-Ethylureido)phenoxy]-2-hydroxypropyl]amino]ethyl]phenylamino]piperidine-1-carboxylic acid
[2-(4-fluorophenyl)ethyl]amide 392624-72-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,4-dichlorobenzylamide 392624-89-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 3,4-dichlorobenzylamide 392625-07-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392625-13-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-thiophen-2-ylpropyl)amide 392625-32-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 3,5-difluorobenzylamide 392625-50-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,3-dimethoxybenzylamide 392625-78-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2-fluorobenzylamide 392626-04-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 3-fluorobenzylamide 392626-20-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-oxo-3-p-tolylpropyl)amide 392626-39-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-p-tolylpropyl)amide 392626-57-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(4-ethylphenyl)ethyl]amide 392626-75-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (2,2-diphenylethyl)amide 392626-89-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,6-difluorobenzylamide 392627-06-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2-trifluoromethylbenzylamide 392627-26-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-pyrazol-1-yl-2-trifluoromethylbenzylamide 392627-53-1P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]

]piperidine-1-carboxylic acid (3-methylbutyl)amide 392627-71-3P,
 4-[4-[2-[(2R)-2-(3-Chlorophenyl)]-2-hydroxyethylamino]ethyl]phenylamino]pi-
 peridine-1-carboxylic acid octylamide monohydrochloride 392627-80-4P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino
]piperidine-1-carboxylic acid 2,5-difluorobenzylamide 392628-10-3P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethoxy]phenylamin
 o]piperidine-1-carboxylic acid 4-fluorobenzylamide 392628-31-8P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa-
 nyl]piperidine-1-carboxylic acid phenylamide 392628-65-8P,
 N-Hexyl-4-[[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]
 phenyl]sulfanyl]-1-piperidinecarboxamide 392628-92-1P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa-
 nyl]piperidine-1-carboxylic acid 4-fluorobenzylamide 392629-19-5P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylsulfa-
 nyl]piperidine-1-carboxylic acid (1-phenylcyclopentylmethyl)amide
 392629-46-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth-
 yl]benzenesulfonyl]piperidine-1-carboxylic acid hexylamide
 392629-70-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth-
 yl]benzenesulfonyl]piperidine-1-carboxylic acid 4-fluorobenzylamide
 392629-89-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]eth-
 yl]benzenesulfonyl]piperidine-1-carboxylic acid ((1-
 phenylcyclopentyl)methyl)amide 392630-11-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-
 (4-hydroxyphenoxy)propylaminoethyl]benzenesulfonyl]piperidine-1-
 carboxylic acid octylamide 392630-43-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-
 hydroxy-3-methylphenoxy)propylaminoethyl]benzenesulfonyl]piperidine-1-
 carboxylic acid octylamide 392630-53-4P, 4-[4-[2-[(2S)-3-
 (Benzo[1,3]dioxol-5-yloxy)-2-hydroxypropylamino]ethyl]benzenesulfonyl]pip-
 eridine-1-carboxylic acid octylamide 392630-57-8P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-methanesulfonylaminophenoxy)propyl
 amino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,5-
 difluorobenzylamide 392631-04-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-
 hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperid-
 ine-1-carbonyl]piperidine-4-carboxylic acid monohydrochloride
 392631-16-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]e-
 thyl]phenoxy]-N-octyl-1-piperidinecarboxamide monohydrochloride
 392631-38-8P, N-(8-Fluoroctyl)-4-[4-[2-[(2S)-2-hydroxy-3-(4-
 hydroxyphenoxy)propyl]amino]ethyl]anilino]-1-piperidinecarboxamide
 dihydrochloride 392631-70-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-
 hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid
 4-fluorobenzylamide monohydrochloride 392631-88-8P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]pi-
 peridine-1-carboxylic acid [4-(3,4-dimethoxyphenyl)butyl]amide
 392632-21-2P, Lithium [4-[4-[4-[2-[(2S)-2-hydroxy-3-(4-
 hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-
 carbonyl]amino]phenoxy]acetate 392632-50-7P, 4-[4-[2-[(2R)-2-Hydroxy-2-
 (4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]pi-
 peridine-1-carboxylic acid octylamide monohydrochloride 392632-66-5P,
 4-[4-[2-[(2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzoimidazol-4-
 yloxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid
 octylamide 392632-95-0P, Lithium 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-
 hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-
 carbonyl]piperidine-4-carboxylate 392633-00-0P, 4-[4-[2-[(2S)-3-(3-
 Acetylaminophenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-
 carboxylic acid octylamide 392633-05-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(5-
 hydroxy-3,4-dihydro-1(2H)-naphthalen-1-ylideneaminoxy)propylamino]ethyl]
 phenylamino]piperidine-1-carboxylic acid octylamide 392633-14-6P,
 4-[4-[2-[(2S)-3-(3-Fluoro-4-hydroxyphenoxy)-2-

hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392633-23-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride 392633-34-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-(3-hexylureido)benzylamide 392633-60-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-cyclohexylpropyl)amide 392633-96-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (cyclopentylmethyl)amide 392634-14-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-[2-methoxy-4-(3-phenoxypropoxy)phenyl]ethyl]amide 392634-35-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(2-oxo-2,3-dihydro-1H-benzoimidazol-4-yloxy)propylamino]ethoxy]phenylamino]piperidine-1-carboxylic acid octylamide 392634-65-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethoxy]phenylamino]piperidine-1-carboxylic acid octylamide 392634-70-7P, Dimethylcarbamic acid 4-[2-[[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carbonyl]amino]ethyl]phenyl ester 392634-94-5P, 4-[4-[2-[(2S)-2-Hydroxy-3-(3-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392634-99-0P, 4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,5-difluorobenzylamide 392635-13-1P, 1-[[4-[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl carbonyl-L-proline methyl ester 392635-35-7P, 1-[[4-[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl carbonyl-3-piperidinecarboxylic acid ethyl ester monohydrochloride 392635-53-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 3-methoxybenzylamide 392635-71-1P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,4-difluorobenzylamide 392636-09-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(4-fluorophenylcarbamoyl)ethyl]amide 392636-31-6P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-[(4-chlorophenyl)methylcarbamoyl]ethyl]amide 392636-57-6P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2-fluoro-4-hydroxybenzylamide 392636-82-7P, Dimethylcarbamic acid 3-fluoro-4-[[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]amino]methyl]phenyl ester 392637-29-5P, [3-Fluoro-4-[[[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]amino]-1-piperidinyl carbonyl]amino]methyl]phenoxy]acetic acid lithium salt 392637-82-0P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(3-fluorophenyl)ethyl]amide 392637-99-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (2-diethylcarbamoylethyl)amide 392638-17-4P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-morpholin-4-yl-3-oxopropyl)amide 392638-40-3P 392638-65-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide monohydrochloride 392638-96-9P, 1-Hexyl-3-[4-[4-[2-[(2S)-2-hydroxy-3-

(4-hydroxyphenoxy)propylaminoethyl]phenylamino)piperidine-1-carbonyl]phenyl]urea 392639-22-4P, [4-[4-[2-[2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](5-methoxy-1H-indol-2-yl)methanone monohydrochloride 392639-41-7P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](7-nitro-1H-indol-2-yl)methanone 392639-67-7P, (5-Bromo-1H-indol-2-yl)[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl]methanone monohydrochloride 392639-84-8P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](3-methoxybenzo[b]thiophen-2-yl)methanone monohydrochloride 392640-09-4P, N-[3-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methoxybenzo[b]thiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenyl]acetamide monohydrochloride 392640-14-1P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](1H-indol-3-yl)methanone 392640-31-2P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](3-methylthiophen-2-yl)methanone monohydrochloride 392640-50-5P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methylthiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]-1,3-dihydrobenzimidazol-2-one monohydrochloride 392640-54-9P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl](1H-indazol-3-yl)methanone monohydrochloride 392640-73-2P, 1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl]hexan-1-one 392640-92-5P, [(2S)-1-(4-Fluorobenzenesulfonyl)pyrrolidin-2-yl][4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-yl]methanone 392641-40-6P, [4-[[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]sulfanyl]piperidin-1-yl](3-methylthiophen-2-yl)methanone 392641-68-8P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]benzenesulfonyl]piperidin-1-yl](2-methylthiophen-3-yl)methanone 392641-81-5P, 1-Hexyl-3-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidine-1-sulfonyl]phenyl]urea monohydrochloride 392641-99-5P, N-[4-[4-[2-[(2S)-3-(4-Fluorophenoxy)-2-hydroxypropylamino]ethyl]phenyl]amino)piperidine-1-sulfonyl]phenyl-N'-hexylurea 392642-02-3P, N-[4-[[4-[4-[2-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropyl]amino]ethyl]anilino]-1-piperidinyl]sulfonyl]phenyl-N'-hexylurea 392642-06-7P 392642-20-5P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(toluene-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol monohydrochloride 392642-36-3P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(1-methyl-1H-imidazole-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol 392642-48-7P, N-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino)piperidin-1-sulfonyl]phenyl]acetamide monohydrochloride 392642-64-7P, N-[5-[[4-[4-[2-[(2R)-2-Hydroxy-2-[4-hydroxy-3-[(methylsulfonyl)amino]phenyl]ethyl]amino]ethyl]anilino]piperidin-1-yl]sulfonyl]-4-methyl-1,3-thiazol-2-yl]acetamide 392642-79-4P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[4-[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide monohydrochloride 392642-90-9P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol 392643-27-5P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[4-[1-[4-(piperidine-1-sulfonyl)phenyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392643-46-8P, 4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino)piperidin-1-yl]benzoic acid ethyl ester dihydrochloride 392643-80-0P,

4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 2,5-difluorobenzyl ester 392644-11-0P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-15-4P
, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid octylamide 392644-19-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (8-fluoroctyl)amide 392644-21-2P, [4-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carbonyl]amino]phenoxy]acetic acid 392644-25-6P, 4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-29-0P,
1-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carbonyl]piperidine-4-carboxylic acid 392644-33-6P,
1-[[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-[(methylsulfonyl)amino]phenyl)ethyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]-3-piperidine carboxylic acid ethyl ester 392644-38-1P, [3-Fluoro-4-[[4-[2-[(S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]amino]-1-piperidinyl]carbonyl]amino]methyl]phenoxy]acetic acid 392644-52-9P,
N-Hexyl-N'-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]urea 392644-56-3P,
1-[4-[4-[2-[(2-[(2-Allylphenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]-3-hexylurea 392644-64-3P,
4-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidin-1-yl]benzoic acid ethyl ester 392644-69-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid 4-fluorobenzylamide 392644-73-4P, 4-[4-[2-[(2R)-2-(3-Chlorophenyl)-2-hydroxyethylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-77-8P, 1-[4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carbonyl]piperidine-4-carboxylic acid 392644-81-4P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenoxy]piperidine-1-carboxylic acid 4-fluorobenzylamide 392644-85-8P,
4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxy-3-methanesulfonylaminophenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392644-88-1P, 4-[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carbonyl]piperidine-1-carboxylic acid octylamide 392644-92-7P,
[4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](5-methoxy-1H-indol-2-yl)methanone 392644-95-0P,
(5-Bromo-1H-indol-2-yl)-[4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]methanone 392644-98-3P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl]-[3-methoxybenzo[b]thiophen-2-yl]methanone 392645-01-1P, N-[3-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methoxybenzo[b]thiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenyl]acetamide 392645-06-6P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](3-methylthiophen-2-yl)methanone 392645-10-2P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-(3-methylthiophene-2-carbonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]-1,3-dihydrobenzimidazol-2-one 392645-15-7P, [4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidin-1-yl](1H-indazol-3-yl)methanone 392645-19-1P, 4-[4-[2-[(2R)-2-Hydroxy-2-(4-hydroxy-3-methanesulfonylaminophenyl)ethylamino]ethyl]phenylamino]piperidine-1-carbonyl]benzoic acid 392645-24-8P, 4-[(2S)-2-Hydroxy-3-[2-[4-[1-

(toluene-4-sulfonyl)piperidin-4-ylamino]phenyl]ethylamino]propoxy]phenol
 392645-27-1P, N-[4-[4-[2-(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-sulfonyl]phenyl]acetamide 392645-31-7P, N-[2-Hydroxy-5-[(1R)-1-hydroxy-2-[2-[1-[4-(3-octylureido)benzenesulfonyl]piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392645-34-0P, (R)-N-[2-Hydroxy-5-[1-hydroxy-2-[2-[1-(4-phenylthiazol-2-yl)piperidin-4-ylamino]phenyl]ethylamino]ethyl]phenyl]methanesulfonamide 392645-39-5P, 4-[4-[2-[(2S)-3-(2-Allylphenoxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392645-44-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid cyclohexylamide 392645-49-7P, 4-[4-[2-[(2S)-3-(6-Aminopyridin-3-yloxy)-2-hydroxypropylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392645-53-3P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid [2-(3-methoxyphenyl)ethyl]amide 392645-58-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392645-61-3P, 4-[Acetyl[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid octylamide 392645-67-9P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid methylamide 392645-73-7P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid isopropylamide 392645-78-2P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid (3-cyclopentylpropyl)amide 392661-78-8P, 4-[4-[2-[(2S)-2-Hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino]piperidine-1-carboxylic acid diethylamide

(preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

IT 51-67-2, Tyramine 70-11-1, 2-Bromo-1-phenyl-1-ethanone 89-99-6, 2-Fluorobenzylamine 95-00-1, 2,4-Dichlorobenzylamine 96-32-2, Methyl bromoacetate 100-01-6, 4-Nitroaniline, reactions 100-02-7, 4-Nitrophenol, reactions 100-27-6, 2-(4-Nitrophenyl)-1-ethanol 100-39-0, Benzyl bromide 100-82-3, 3-Fluorobenzylamine 102-49-8, 3,4-Dichlorobenzylamine 103-16-2, 4-Benzylxyphenol 103-71-9, Phenyl isocyanate, reactions 108-46-3, Resorcinol, reactions 109-00-2, 3-Hydroxypyridine 109-90-0, Ethyl isocyanate 110-91-8, Morpholine, reactions 111-26-2, Hexylamine 111-86-4, Octylamine 121-60-8, 4-(Acetylamino)benzenesulfonyl chloride 140-75-0, 4-Fluorobenzylamine 140-89-6, Potassium ethyl xanthate 142-61-0, Hexanoyl chloride 177-11-7, 1,4-Dioxa-8-azaspiro[4.5]decane 288-13-1, Pyrazole 349-88-2, 4-Fluorobenzenesulfonyl chloride 367-12-4, 2-Fluorophenol 371-40-4, 4-Fluoroaniline 371-41-5, 4-Fluorophenol 404-70-6, 3-Fluorophenethylamine 451-46-7, Ethyl 4-fluorobenzoate 459-19-8, 4-Fluorophenethylamine hydrochloride 459-56-3, (4-Fluorophenyl)methanol 532-55-8, Benzoyl isothiocyanate 533-31-3, Sesamol 603-85-0, 2-Amino-3-nitrophenol 606-83-7, 3,3-Diphenylpropionic acid 621-42-1, N-(3-Hydroxyphenyl)acetamide 646-07-1, 4-Methylvaleric acid 753-90-2, 2,2,2-Trifluoroethylamine 771-50-6, 1H-Indole-3-carboxylic acid 932-96-7, N-Methyl-4-chloroaniline 1123-00-8, 2-Cyclopentylacetic acid 1126-09-6, Ethyl isonicotinate 1145-15-9, 5-(3,4-Dimethoxyphenyl)pentanoic acid 1197-55-3, 2-(4-Aminophenyl)acetic acid 1477-50-5, 1H-Indole-2-carboxylic acid 1484-26-0, 3-(Benzylxy)aniline 1611-57-0, 1,1,3,3-Tetramethylbutyl isocyanate 1679-64-7, 4-(Methoxycarbonyl)benzoic acid 1745-81-9, 2-Allylphenol 1795-48-8, Isopropyl isocyanate 2039-67-0, 3-Methoxyphenethylamine 2104-19-0,

9-Methoxy-9-oxononanoic acid 2150-46-1, Methyl 2,5-dihydroxybenzoate
 2525-62-4, Hexyl isocyanate 2577-48-2, Methyl (2S)-2-
 pyrrolidinecarboxylate 2812-46-6, tert-Butyl (2S)-2-
 pyrrolidinecarboxylate 3048-01-9, 2-Trifluoromethylbenzylamine
 3158-26-7, Octyl isocyanate 3173-53-3, Cyclohexyl isocyanate
 3612-20-2, 1-Benzyl-4-piperidone 4124-41-8 4382-54-1,
 5-Methoxy-1H-indole-2-carboxylic acid 4393-09-3, 2,3-
 Dimethoxybenzylamine 4441-63-8, 4-Cyclohexylbutanoic acid 4498-67-3,
 1H-Indazole-3-carboxylic acid 4521-22-6, 4-(p-Tolyl)butyric acid
 4619-20-9, 3-(4-Methylbenzoyl)propionic acid 4653-11-6,
 4-(2-Thienyl)butyric acid 5006-62-2, Ethyl 3-piperidinecarboxylate
 5071-96-5, 3-Methoxybenzylamine 5382-16-1, 4-Hydroxypiperidine
 5597-50-2, Methyl 3-(4-hydroxyphenyl)propanoate 6053-58-3,
 3-Cyclopentylpropylamine **6322-56-1**, 4-Hydroxy-3-
 nitroacetophenone 6373-46-2, 4-(Phenylmethoxy)benzenamine 6960-45-8,
 7-Nitro-1H-indole-2-carboxylic acid 7254-19-5, 5-Bromo-1H-indole-2-
 carboxylic acid 7693-46-1, 4-Nitrophenyl chloroformate 7795-95-1,
 1-Octanesulfonyl chloride 13472-00-9, 4-(2-Aminoethyl)aniline
 18162-48-6, tert-Butyldimethylchlorosilane 19354-50-8,
 3-Methoxybenzo[b]thiophene-2-carboxylic acid 23806-24-8,
 3-Methyl-2-thiophenecarboxylic acid 28315-93-7, 5-Hydroxy-3,4-dihydro-
 1(2H)-naphthalenone 29968-78-3, 4-Nitrophenethylamine hydrochloride
 56962-11-9, 2-Chloro-4-hydroxybenzaldehyde 58479-61-1,
 tert-Butylchlorodiphenylsilane 61306-74-9, 5,8-Dimethoxy-3,4-dihydro-
 2(1H)-quinolinone 62600-71-9, (2R)-2-(3-Chlorophenyl)oxirane
 64740-36-9, 3-(4-Ethylphenyl)propionic acid 69385-30-4,
 2,6-Difluorobenzylamine 69812-29-9, 2-Acetamido-4-methyl-5-
 thiazolesulfonyl chloride 70987-78-9, (S)-(+)-Glycidyl
 4-methylbenzenesulfonate 72235-52-0, 2,4-Difluorobenzylamine
 75637-30-8, 5-Acetyl-2-(phenylmethoxy)benzamide 75853-20-2,
 2,5-Difluorobenzyl alcohol 82380-18-5, 2-Fluoro-4-hydroxybenzonitrile
 85118-06-5, 2,5-Difluorobenzylamine 97801-56-4, (2S)-1-[(4-
 Fluorophenyl)sulfonyl]-2-pyrrolidinecarboxylic acid 105184-38-1,
 3,5-Difluorophenylacetic acid 115314-14-2, (2S)-Oxiranylmethyl
 3-nitrobenzenesulfonate 132740-43-3, 4-Fluorobenzyl isocyanate
 137049-00-4, 1-Methyl-1H-imidazole-4-sulfonyl chloride 160818-96-2,
 4-[3-(Cyclopentyloxy)-4-methoxyphenyl]piperidine 194853-86-6,
 4-Fluoro-2-(trifluoromethyl)benzonitrile 246262-20-4,
 N-[2-(Benzylxy)-5-((2S)-oxiranylmethoxy)phenyl]methanesulfonamide
 246262-39-5, N-[2-(Benzylxy)-5-[(1R)-2-iodo-1-
 [(triethylsilyl)oxy]ethyl]phenyl]methanesulfonamide 340756-75-4,
 N-[5-((1R)-2-Amino-1-hydroxyethyl)-2-hydroxyphenyl]methanesulfonamide
 391671-82-2, tert-Butyl[4-((2S)-oxiranylmethoxy)phenoxy]diphenylsilane
 391671-98-0, 4-(Triisopropylsilyloxy)-3-methylphenol 391674-53-6,
 4-[(Hexylamino)carbonyl]amino]benzoic acid 392621-97-5,
 4-[4-(2-Aminoethyl)phenylamino]piperidine-1-carboxylic acid
 4-fluorobenzylamide 392622-28-5, 4-[4-(2-Aminoethyl)anilino]-N-octyl-1-
 piperidinecarboxamide 392622-46-7, 2-[(E)-2-(4-Nitrophenyl)diazenyl]-4-
 ((2S)-oxiranylmethoxy)pyridine 392623-39-1, 4-[4-(2-Aminoethyl)anilino]-
 N-ethyl-1-piperidinecarboxamide formate 392627-94-0,
 4-[4-(2-Aminoethyl)anilino]-N-(2,5-difluorobenzyl)-1-
 piperidinecarboxamide 392629-65-1, 4-[(4-(2-Aminoethyl)phenyl)sulfonyl]-
 N-hexyl-1-piperidinecarboxamide 392634-22-9, 3-[2-Methoxy-4-(3-
 phenoxypropoxy)phenyl]propanoic acid 392636-78-1 392637-74-0,
 [2-[4-[1-(tert-Butyldiphenylsilyloxy)-2-
 fluorobenzylcarbamoyl]piperidin-4-ylamino]phenyl]ethyl]amine formate
 392638-32-3, [2-[4-[1-(4-Morpholin-4-yl-4-oxobutyryl)piperidin-4-

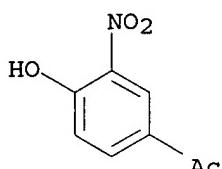
ylamino]phenyl]ethyl]carbamic acid tert-butyl ester 392638-51-6,
 [4- [4- (2-Aminoethyl)anilino]-1-piperidinyl] (1H-indol-2-yl)methanone
 392641-11-1, [4- [4- (2-Aminoethyl)anilino]-1-piperidinyl][(2S)-1-[(4-
 fluorophenyl)sulfonyl]pyrrolidinyl]methanone
 (reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor
 agonists)

IT **6322-56-1**, 4-Hydroxy-3-nitroacetophenone

(reactant; preparation of heterocyclic amino alc. beta-3 adrenergic receptor
 agonists)

RN 6322-56-1 USPATFULL

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 34 OF 101 USPATFULL on STN

ACCESSION NUMBER: 2004:179131 USPATFULL

TITLE: Chemical uncouplers for the treatment of obesity

INVENTOR(S): Hansen, Birgit Sehested, Stenlose, DENMARK

Hansen, Thomas Kruse, Herlev, DENMARK

Tullin, Soren, Soborg, DENMARK

Colding-Jorgensen, Morten, Gentofte, DENMARK

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004138301	A1	20040715
APPLICATION INFO.:	US 2003-699338	A1	20031031 (10)

	NUMBER	DATE	
PRIORITY INFORMATION:	DK 2002-1719	20021108	<--
	DK 2003-827	20030604	
	DK 2003-734	20030514	
	US 2002-425642P	20021112 (60)	<--
	US 2003-476275P	20030605 (60)	

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Reza Green, Esq., Novo Nordisk Pharmaceuticals, Inc.,
 100 College Road West, Princeton, NJ, 08540

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT: 4286

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to chemical uncouplers with a broader safety window making the use of them in treating obesity and, consequently, in the treatment of obesity related diseases and conditions such as atherosclerosis, hypertension, diabetes, especially type 2 diabetes (NIDDM (non-insulin dependent diabetes mellitus)), impaired glucose tolerance, dyslipidemia, coronary heart disease, gallbladder disease,

osteoarthritis and various types of cancer such as endometrial, breast, prostate and colon cancers and the risk for premature death as well as other conditions, such as diseases and disorders, which conditions are improved by an increase in mitochondrial respiration, more attractive.

INCL INCLM: 514/523.000

NCL NCLM: 514/523.000

IC [7]

ICM A61K031-277

IPCI A61K0031-277 [ICM, 7]; A61K0031-275 [ICM, 7,C*]

IPCR A61K0031-166 [I,A]; A61K0031-166 [I,C*]; A61K0031-17 [I,A];
 A61K0031-17 [I,C*]; A61K0031-185 [I,C*]; A61K0031-19 [I,A];
 A61K0031-21 [I,C*]; A61K0031-216 [I,A]; A61K0031-40 [I,A];
 A61K0031-40 [I,C*]; A61K0031-403 [I,C*]; A61K0031-404 [I,A];
 C07D0213-00 [I,C*]; C07D0213-70 [I,A]; C07D0277-00 [I,C*];
 C07D0277-32 [I,A]; C07D0295-00 [I,C*]; C07D0295-192 [I,A];
 C07D0295-26 [I,A]; C07D0307-00 [I,C*]; C07D0307-28 [I,A];
 C07D0307-38 [I,A]; C07D0311-00 [I,C*]; C07D0311-16 [I,A];
 C07D0333-00 [I,C*]; C07D0333-34 [I,A]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 140:423475 * WO	A2	2004041256
	CA 142:6314	WO	2004101505
* CA Indexing for this record included			
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 1, 27, 29			
ST	arene prepn mitochondrial uncoupler obesity treatment; atherosclerosis hypertension cancer diabetes dyslipidemia heart disease treatment arene; indolylmethylenemalononitrile benzamide prepn mitochondrial respiration increase; butylchlorohydroxymethylnitrotrifluoromethylphenylbenzamide prepn chem uncoupler		
IT	Drugs (antiaging; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Antiarteriosclerotics (antiatherosclerotics; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Intestine, neoplasm (colon, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Artery, disease (coronary, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Blood vessel, disease (diabetic microangiopathy, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Lipids, biological studies (dyslipidemia, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Uterus, neoplasm (endometrium, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		
IT	Artery, disease (endothelium, injury; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)		

IT Disease, animal
 (impaired glucose tolerance; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Heart, disease
 (injury, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Respiration, animal
 (mitochondrial, enhancers; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Nerve
 (neuron, damage treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Diabetes mellitus
 (non-insulin-dependent, treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Nerve
 (peripheral, peripheral nerve cell apoptosis treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Anti-Alzheimer's agents

 Antiarthritis

Antidiabetic agents

 Antihypertensives

Antibesity agents

 Cardiovascular agents

 Human
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Eye
 (retina, diabetic microvascular disease treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT Aging, animal

 Alzheimer's disease

 Atherosclerosis

 Cataract

 Diabetes mellitus

 Gallbladder, disease

 Hypertension

 Mammary gland, neoplasm

 Neoplasm

 Obesity

 Osteoarthritis

 Prostate gland, neoplasm
 (treatment; preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 17209-15-3P 24985-23-7P 59266-20-5P 59266-35-2P 62546-96-7P
 71308-35-5P 120607-82-1P 147167-95-1P 157397-08-5P 170449-05-5P
 186582-17-2P 691887-18-0P 691887-19-1P 691887-26-0P 691887-27-1P
 691887-28-2P 691887-29-3P 691887-30-6P 691887-31-7P 691887-32-8P
 691887-33-9P 691887-34-0P 691887-35-1P 691887-38-4P 691887-39-5P
 691887-40-8P 691887-41-9P 691887-42-0P 691887-43-1P 691887-44-2P
 691887-45-3P 691887-46-4P 691887-47-5P 691887-48-6P 691887-49-7P
 691887-50-0P 691887-51-1P 691887-52-2P 691887-53-3P 691887-54-4P
 691887-55-5P 691887-56-6P 691887-57-7P 691887-58-8P 691887-59-9P
 691887-60-2P 691887-61-3P 691887-62-4P 691887-63-5P 691887-64-6P
 691887-65-7P 691887-66-8P 691887-67-9P 691887-68-0P 691887-69-1P

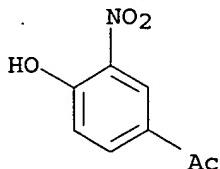
691887-70-4P 691887-72-6P 691887-73-7P 691887-74-8P 691887-75-9P
 691887-76-0P 691887-77-1P 691887-78-2P 691887-79-3P 691887-80-6P
 691887-81-7P 691887-82-8P
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 728-40-5 1211-35-4 1420-07-1 1568-70-3, 4-Methoxy-2-nitrophenol
 3244-54-0, 3,6-Dinitrocarbazole 3293-92-3 5329-21-5 **6322-56-1**
 , 4-Hydroxy-3-nitroacetophenone 10278-46-3, N-(4-Cyanophenyl)benzamide
 10537-47-0 10537-84-5 14601-82-2 17109-36-3 19037-69-5
 22014-02-4 53566-09-9 62546-89-8 65570-43-6 96330-29-9
 106480-61-9 122453-73-0 122454-29-9 256471-14-4 282542-01-2
 288859-92-7 303147-77-5 306980-85-8 691887-20-4 691887-21-5
 691887-22-6 691887-23-7 691887-24-8 691887-25-9
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT 88-17-5, 2-Trifluoromethylaniline 99-30-9, 2,6-Dichloro-4-nitroaniline
 105-56-6, Ethyl cyanoacetate 109-77-3, Malononitrile 121-01-7
 121-50-6, 2-Chloro-5-trifluoromethylaniline 121-87-9,
 2-Chloro-4-nitroaniline 128-37-0, 2,6-Di-tert-butyl-4-methylphenol,
 reactions 304-06-3, 3-Phenylsalicylic acid 320-51-4 328-74-5,
 3,5-Bistrifluoromethylaniline 328-93-8, 2,5-Bistrifluoromethylaniline
 393-11-3, 4-Nitro-3-trifluoromethylaniline 535-52-4,
 2-Fluoro-5-trifluoromethylaniline 548-51-6, 3-Isopropyl-6-
 methylsalicylic acid 554-00-7, 2,4-Dichloroaniline 555-21-5,
 4-Nitrophenylacetonitrile 654-70-6, 4-Cyano-3-trifluoromethylaniline
 873-74-5, 4-Cyanoaniline 998-40-3, Tributylphosphine 1620-98-0
 1851-09-8, 4-Chlorophenylsulfonylacetonitrile 2233-18-3 2274-42-2,
 Methanesulfonylacetonitrile 2338-75-2, 4-Trifluoromethylphenylacetonitrile
 2537-48-6, Diethyl cyanomethylphosphonate 2683-43-4,
 2,4-Dichloro-6-nitroaniline 2739-97-1, 2-Pyridylacetonitrile
 3558-17-6 4389-53-1 5059-30-3, 2-Chloro-3-formylindole 6625-96-3,
 5-Nitro-3-formylindole 6934-03-8, 3-tert-Butyl-6-methylsalicylic acid
 7053-88-5, 3-Isopropylsalicylic acid 7605-28-9,
 Phenylsulfonylacetonitrile 14035-33-7 17722-17-7 17826-09-4
 19715-19-6, 3,5-Di-tert-butylsalicylic acid 21803-75-8,
 2-Chloro-4-cyanoaniline 23050-96-6, 3-tert-Butyl-5-methylsalicylic acid
 25365-71-3, 2-Phenyl-3-formylindole 32083-66-2, 4-
 Fluorophenylsulfonylacetonitrile 41648-48-0 49561-96-8,
 4-Trifluoromethoxyphenylacetonitrile 54685-31-3, 3,5-Di-tert-butyl-4-
 hydroxyacetophenone 59889-29-1 61437-85-2 62593-17-3,
 2,4-Dichloro-6-trifluoromethylaniline 67515-55-3, 4-Fluoro-3-
 trifluoromethylbenzoic acid 85068-32-2 87475-64-7 87617-29-6
 115754-21-7 119910-45-1 120069-21-8, Isopropylsulfonylacetonitrile
 126891-45-0 142350-18-3 161622-05-5, 3-Fluoro-5-
 trifluoromethylbenzoic acid 174824-16-9, 2-Bromo-3,5-
 bistrifluoromethylaniline 203310-42-3 691887-83-9 691887-84-0
 691887-85-1 691887-86-2
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

IT **6322-56-1**, 4-Hydroxy-3-nitroacetophenone
 (preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity)

RN 6322-56-1 USPATFULL
 CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



L130 ANSWER 35 OF 101 USPATFULL on STN
 ACCESSION NUMBER: 2004:172844 USPATFULL
 TITLE: Amide compounds
 INVENTOR(S): Inoue, Yoshikazu, Osaka, JAPAN
 Terasawa, Takeshi, Osaka, JAPAN
 Takasugi, Hisashi, Osaka, JAPAN
 Nagayoshi, Akira, Osaka, JAPAN
 Ueshima, Koji, Osaka, JAPAN
 Sawada, Masa, Osaka, JAPAN
 Furukawa, Yoshiro, Osaka, JAPAN
 Mikami, Masafumi, Osaka, JAPAN
 Hinoue, Kazumasa, Osaka, JAPAN
 Fukumoto, Daisuke, Osaka, JAPAN
 PATENT ASSIGNEE(S): FUJISAWA PHARMACEUTICAL CO., LTD., Osaka-shi, JAPAN,
 550-0002 (non-U.S. corporation)
 DAISO CO., LTD., Osaka-shi, JAPAN, 550-0002 (non-U.S.
 corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION:
 APPLICATION INFO.: US 2004133008 A1 20040708
 US 2003-694091 A1 20031028 (10)

NUMBER	DATE
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PRIORITY INFORMATION: AU 2002-2002952331 20021029
 AU 2003-2003902622 20030527 <--

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940
 DUKE STREET, ALEXANDRIA, VA, 22314

NUMBER OF CLAIMS: 29
 EXEMPLARY CLAIM: 1

LINE COUNT: 10367

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound of the formula (I) ##STR1##

wherein

R¹ is hydrogen, lower alkyl, lower alkenyl, halo(lower)alkyl, cyclo(lower)alkyl, lower alkoxy, lower alkylthio, acyl, optionally substituted aryl or NR³R⁴;

R² is hydrogen; or aryl or heteroaryl, each of which may be substituted;

X is direct bond or bivalent residue derived from piperazine;

Y is -(A^{sup.1}).sub.n-(A^{sup.2}).sub.m-, wherein n and m are independently 0 or 1); ##STR2##

is bivalent residue derived from arene or heteroarene; and ##STR3##

is bivalent residue derived from arene or heteroarene, or a salt thereof. The compound of the present invention and a salt thereof inhibit apolipoprotein B (Apo B) secretion and are useful as a medicament for prophylactic and treatment of diseases or conditions resulting from elevated circulating levels of Apo B.

INCL	INCLM: 546/226.000
	INCLS: 548/530.000
NCL	NCLM: 546/226.000
	NCLS: 548/530.000
IC	[7]
	ICM C07D211-06
IPCI	C07D0211-06 [ICM,7]; C07D0211-00 [ICM,7,C*]
IPCR	C07D0207-00 [I,C*]; C07D0207-325 [I,A]; C07D0209-00 [I,C*]; C07D0209-08 [I,A]; C07D0213-00 [I,C*]; C07D0213-30 [I,A]; C07D0213-38 [I,A]; C07D0213-40 [I,A]; C07D0213-56 [I,A]; C07D0213-73 [I,A]; C07D0213-74 [I,A]; C07D0213-75 [I,A]; C07D0213-81 [I,A]; C07D0213-82 [I,A]; C07D0217-00 [I,C*]; C07D0217-22 [I,A]; C07D0231-00 [I,C*]; C07D0231-12 [I,A]; C07D0231-38 [I,A]; C07D0249-00 [I,C*]; C07D0249-08 [I,A]; C07D0277-00 [I,C*]; C07D0277-40 [I,A]; C07D0277-48 [I,A]; C07D0295-00 [I,C*]; C07D0295-155 [I,A]; C07D0401-00 [I,C*]; C07D0401-12 [I,A]; C07D0401-14 [I,A]; C07D0403-00 [I,C*]; C07D0403-04 [I,A]; C07D0403-12 [I,A]; C07D0405-00 [I,C*]; C07D0405-12 [I,A]; C07D0409-00 [I,C*]; C07D0409-12 [I,A]; C07D0409-14 [I,A]; C07D0417-00 [I,C*]; C07D0417-12 [I,A]; C07D0417-14 [I,A]

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2006 ACS on STN

	PATENT	KIND	DATE
OS	CA 140:406743 * WO	A2	20040513
* CA Indexing for this record included			
CC	27-16 (Heterocyclic Compounds (One Hetero Atom))		
	Section cross-reference(s): 1, 63		
ST	amide prepn apolipoprotein B secretion inhibitor hypolipemic antidiabetic cardiovascular; pyridine amide prepn apolipoprotein B secretion inhibitor diabetes hyperlipidemia		
IT	Amides, preparation (Apo B inhibitors; preparation of amides as apolipoprotein B secretion inhibitors)		
IT	Apolipoproteins (B, secretion inhibition; preparation of amides as apolipoprotein B secretion inhibitors)		
IT	Antiarteriosclerotics (antiatherosclerotics; preparation of amides as apolipoprotein B secretion inhibitors)		
IT	Artery, disease (coronary, restenosis; preparation of amides as apolipoprotein B secretion inhibitors)		
IT	Artery, disease		

(coronary; preparation of amides as apolipoprotein B secretion inhibitors)

IT Lipids, biological studies
 (hyperlipidemia; preparation of amides as apolipoprotein B secretion inhibitors)

IT Lipoproteins
 (hyperlipoproteinemia; preparation of amides as apolipoprotein B secretion inhibitors)

IT Lipoproteins
 (hypoalphalipoproteinemia; preparation of amides as apolipoprotein B secretion inhibitors)

IT Heart, disease
 (infarction; preparation of amides as apolipoprotein B secretion inhibitors)

IT Diabetes mellitus
 (non-insulin-dependent; preparation of amides as apolipoprotein B secretion inhibitors)

IT Pancreas, disease
 (pancreatitis; preparation of amides as apolipoprotein B secretion inhibitors)

IT Anticholesteremic agents
Antidiabetic agents
Antiobesity agents

Atherosclerosis

Cardiovascular agents

Human

Hypercholesterolemia

Hypertriglyceridemia

Hypolipemic agents

Obesity
 (preparation of amides as apolipoprotein B secretion inhibitors)

IT Brain, disease
 (stroke; preparation of amides as apolipoprotein B secretion inhibitors)

IT Disease, animal
 (syndrome X; preparation of amides as apolipoprotein B secretion inhibitors)

IT 689154-78-7P, tert-Butyl N-[2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl] [4-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]phenyl] carbamate 689155-02-0P, tert-Butyl [6-[2-[[4-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]phenyl]amino]ethyl]-2-pyridinyl]carbamate 689155-34-8P, tert-Butyl N-[2-[6-[(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl] [4-[[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl]carbamate 689156-54-5P, tert-Butyl [4-[2-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate 689157-01-5P, tert-Butyl [6-[2-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate 689158-07-4P, tert-Butyl N-[4-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-49-4P, tert-Butyl N-[4-[[2-(dimethylamino)-4-methylbenzoyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-90-5P, tert-Butyl N-[5-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]-2-pyridinyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689159-44-2P, N-[4-[[6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetyl]amino]phenyl] -6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689159-83-9P, N-[4-[2-[3-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethoxy]phenyl] -6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689161-36-2P, tert-Butyl [6-[2-[5-[(2-isopropoxy-4-methylbenzoyl)amino]-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl]-2-pyridinyl]carbamate 689161-49-7P, N-[1-[[2-(Formylamino)-1,3-thiazol-4-yl]acetyl]-2,3-dihydro-1H-indol-5-yl]-2-isopropoxy-4-methylbenzamide

689162-25-2P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-4-methyl-2-(methylamino)benzamide 689165-49-9P, tert-Butyl [6-[2-[4-[(2-isopropoxy-4-methylbenzoyl)amino]phenoxy]ethyl]-2-pyridinyl]carbamate
 689165-83-1P, tert-Butyl [4-[2-[4-[(2-isopropoxy-4-methylbenzoyl)amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate
 689166-11-8P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-[(1-trityl-1H-1,2,4-triazol-3-yl)methyl]-1,2,3,4-tetrahydro-6-isoquinolinyl]nicotinamide 689166-66-3P, 2-Isopropoxy-4-methyl-N-[2-[(1-trityl-1H-1,2,4-triazol-3-yl)methyl]-1,2,3,4-tetrahydro-6-isoquinolinyl]benzamide 689167-02-0P, tert-Butyl [4-[[[2-(4-methylphenyl)-1-cyclohexen-1-yl]carbonyl]amino]phenyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689167-14-4P, tert-Butyl N-[2-(1H-pyrazol-1-yl)ethyl][4-[[4'-(trifluoromethyl)-1,1'-biphenyl-2-yl]carbonyl]amino]phenyl]carbamate 689167-96-2P, tert-Butyl N-[5-[[2-(4-methylphenyl)-1-cyclohexen-1-yl]carbonyl]amino]-2-pyridinyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689171-04-8P, N-[4-[2-[3-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689175-77-7P, tert-Butyl [5-methyl-2-[[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]amino]carbonyl]phenyl]carbamate 689178-35-6P, 4-Chloro-2-(dimethylamino)-N-[4-[2-[5-(tritylamino)-1H-pyrazol-1-yl]ethoxy]phenyl]benzamide 689178-46-9P 689179-23-5P, 4'-(Trifluoromethyl)-N-[6-[2-[5-(tritylamino)-1H-pyrazol-1-yl]ethoxy]-3-pyridinyl]-1,1'-biphenyl-2-carboxamide 689179-37-1P, 2-(4-Methylphenyl)-N-[6-[2-[5-(tritylamino)-1H-pyrazol-1-yl]ethoxy]-3-pyridinyl]-1-cyclohexene-1-carboxamide 689180-05-0P, 4-Chloro-2-(dimethylamino)-N-[4-[[2-[3-(tritylamino)-1H-pyrazol-1-yl]ethyl]amino]phenyl]benzamide 689180-40-3P, 4-Chloro-2-(dimethylamino)-N-[6-[[2-[3-(tritylamino)-1H-pyrazol-1-yl]ethyl]amino]-3-pyridinyl]benzamide 689180-94-7P, tert-Butyl N-[4-[[4-chloro-2-(dimethylamino)benzoyl]amino]phenyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689181-81-5P, tert-Butyl N-[5-[[4-chloro-2-(dimethylamino)benzoyl]amino]-2-pyridinyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689182-37-4P 689182-52-3P, tert-Butyl N-[5-[[4-chloro-2-(dimethylamino)benzoyl]amino]-2-pyridinyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689182-63-6P, tert-Butyl N-[4-[[2-(dimethylamino)-4-(trifluoromethyl)benzoyl]amino]phenyl][2-(1H-pyrazol-1-yl)ethyl]carbamate
 (Apo B inhibitor; preparation of amides as apolipoprotein B secretion inhibitors)

IT 1121-60-4P, 2-Pyridinecarboxaldehyde 689139-42-2P, N-[1-(2-Pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2-(1-pyrrolidinyl)benzamide 689139-51-3P, 2-(1-Piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689139-68-2P, 2-(3,6-Dihydro-1(2H)-pyridinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689139-88-6P, 2-(4-Methyl-1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689140-17-8P, 4-Methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2-(1-pyrrolidinyl)benzamide 689140-42-9P, 4-Methyl-2-(1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689140-63-4P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689140-85-0P, 2-(4,4-Dimethyl-1-piperidinyl)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689141-06-8P, 4-Methyl-2-(4-morpholinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689141-23-9P, 4-Methyl-2-(4-methyl-1-piperazinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689141-42-2P, 4-Methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2-(4-

thiomorpholinyl)benzamide 689141-54-6P, 2-(1,1-Dioxido-4-thiomorpholinyl)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689141-73-9P, 2-(Hexahydro-1H-azepin-1-yl)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689141-88-6P, 2-(1-Piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-4-(trifluoromethyl)benzamide 689142-06-1P, 4-Chloro-2-(1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689142-22-1P, 4-Methoxy-2-(1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689142-49-2P, 5-Methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2-(1-pyrrolidinyl)benzamide 689142-65-2P, 5-Methyl-2-(1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689142-83-4P, 2-(1-Piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-3-(trifluoromethyl)benzamide 689142-89-0P, N-[1-[(6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-2-(1-piperidinyl)benzamide 689142-95-8P, N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-2-(1-piperidinyl)benzamide 689143-01-9P, N-[1-[(6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-4-methyl-2-(1-piperidinyl)benzamide 689143-06-4P; N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-4-methyl-2-(1-piperidinyl)benzamide 689143-22-4P, 2-(Dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689143-28-0P, 2-(Dimethylamino)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689143-63-3P, 6-Methyl-2-(1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689143-80-4P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689143-91-7P, 2-(1-Piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689143-96-2P, 2-(4-Methyl-1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689144-13-6P, 6-Methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2-(4-morpholinyl)nicotinamide 689144-19-2P, tert-Butyl [6-[2-[5-[[6-methyl-2-(1-piperidinyl)-3-pyridinyl]carbonyl]amino]-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl]-2-pyridinyl]carbamate 689144-24-9P, N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-6-methyl-2-(1-piperidinyl)nicotinamide 689144-42-1P, tert-Butyl [6-[2-[5-[[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl]-2-pyridinyl]carbamate 689144-47-6P, N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-2-(dimethylamino)-6-methylnicotinamide 689144-52-3P, 2-(Dimethylamino)-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689144-58-9P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[(2-pyridinylacetyl)amino]phenyl]benzamide 689144-65-8P, 2-(Dimethylamino)-4-methyl-N-[4-[(2-pyridinylacetyl)amino]phenyl]benzamide 689144-84-1P, 4-Methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-2-(1-pyrrolidinyl)benzamide 689144-91-0P, 4-Methyl-2-(1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689144-96-5P, 2-(Hexahydro-1H-azepin-1-yl)-4-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689145-02-6P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689145-08-2P, 2-(Dimethylamino)-4-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689145-20-8P, tert-Butyl N-[4-[[6-methyl-2-(1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689145-25-3P, 6-Methyl-2-(1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689145-31-1P, tert-Butyl N-[4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate

689145-36-6P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689145-50-4P, tert-Butyl N-[4-[[6-methyl-2-(4-thiomorpholinyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689145-56-0P, 6-Methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-2-(4-thiomorpholinyl)nicotinamide 689145-63-9P, tert-Butyl N-[4-[[6-methyl-2-(4-morpholinyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689145-69-5P, 6-Methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-2-(4-morpholinyl)nicotinamide 689145-80-0P, tert-Butyl N-[4-[[2-(1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689145-88-8P, 2-(1-Piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689145-94-6P, tert-Butyl N-[4-[[2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689146-00-7P, 2-(4-Methyl-1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689146-06-3P, tert-Butyl N-[4-[[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689146-10-9P, 2-(Dimethylamino)-6-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689146-14-3P, tert-Butyl N-[4-[[2-(dimethylamino)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689146-19-8P, 2-(Dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689146-39-2P, 6-Methyl-2-(1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-45-0P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-51-8P, 2-(Dimethylamino)-6-methyl-N-[4-[[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-62-1P, 2-(1-Piperidinyl)-N-[4-[[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-72-3P, 2-(4-Methyl-1-piperidinyl)-N-[4-[[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-85-8P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[[2-(2-pyridinyl)ethoxy]-3-pyridinyl]nicotinamide 689146-90-5P, 2-(Dimethylamino)-6-methyl-N-[6-[[2-(2-pyridinyl)ethoxy]-3-pyridinyl]nicotinamide 689147-06-6P, N-[4-[[4-(3-Cyanobenzyl)-1-piperazinyl]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689147-12-4P, N-[4-[[4-(3-Cyanobenzyl)-1-piperazinyl]phenyl]-2-(dimethylamino)-6-methylnicotinamide 689147-32-8P, N-[6-[[4-(3-Cyanobenzyl)-1-piperazinyl]-3-pyridinyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689147-38-4P, N-[6-[[4-(3-Cyanobenzyl)-1-piperazinyl]-3-pyridinyl]-2-(dimethylamino)-6-methylnicotinamide 689147-50-0P, 2-(Dimethylamino)-N-[4-[[formyl][2-(2-pyridinyl)ethyl]amino]phenyl]-4-methylbenzamide 689147-88-4P, 4-Chloro-2-(dimethylamino)-N-[4-[[formyl][2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689147-94-2P, 4-Chloro-2-(dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689148-08-1P, 2-(Dimethylamino)-4-fluoro-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689148-27-4P, 2-(Dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-4-(trifluoromethyl)benzamide 689148-48-9P, 2-(Dimethylamino)-4-methoxy-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689148-89-8P, 2-(Dimethylamino)-4-ethyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689149-13-1P, 2-(Dimethylamino)-4-isopropyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689149-20-0P, 2-(Dimethylamino)-4-isopropyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide trihydrochloride 689149-50-6P, 4-tert-Butyl-2-(dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689149-57-3P, 4-tert-Butyl-2-(dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide trihydrochloride 689149-63-1P, 2-(Diethylamino)-4-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689149-91-5P,

4-Methoxy-2-(4-methyl-1-piperidinyl)-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide 689150-06-9P,
 2-(Dimethylamino)-3-methyl-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide 689150-13-8P, 2-(Dimethylamino)-5-methyl-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide 689150-27-4P,
 5-Chloro-2-(dimethylamino)-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide 689150-34-3P, 5-Chloro-2-(dimethylamino)-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide trihydrochloride 689150-46-7P,
 2-(Dimethylamino)-4-methyl-N-[4-(2-pyridinylmethyl)phenyl]benzamide 689150-53-6P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[(2-(2-pyridinyl)ethoxy)phenyl]benzamide 689150-82-1P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]aminophenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689150-89-8P, 2-(Dimethylamino)-N-[4-[formyl[2-(2-pyridinyl)ethyl]aminophenyl]benzamide 689150-97-8P,
 2-(Dimethylamino)-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]benzamide 689151-03-9P, N-[4-[2-[6-(Acetylamino)-2-pyridinyl]ethyl]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689151-10-8P,
 N-[4-[2-(6-Amino-2-pyridinyl)ethyl]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689151-32-4P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[(2-(2-pyridinyl)ethyl)amino]-3-pyridinyl]benzamide 689151-40-4P, 2-(Dimethylamino)-4-methyl-N-[6-[(2-(2-pyridinyl)ethyl)aminol-3-pyridinyl]benzamide 689151-46-0P, tert-Butyl N-[4-[[6-methyl-2-(1-pyrrolidinyl)-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689151-53-9P, 6-Methyl-N-[4-[(2-(2-pyridinyl)ethyl)aminolphenyl]-2-(1-pyrrolidinyl)nicotinamide 689151-61-9P, tert-Butyl N-[4-[[2-(diethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689151-70-0P, 2-(Diethylamino)-6-methyl-N-[4-[(2-(2-pyridinyl)ethyl)aminolphenyl]nicotinamide 689151-74-4P, tert-Butyl N-[4-[[2-(diethylamino)-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689151-80-2P, 2-(Diethylamino)-N-[4-[(2-(2-pyridinyl)ethyl)aminolphenyl]nicotinamide 689151-88-0P,
 2-[Ethyl(methyl)amino]-N-[4-[formyl[2-(2-pyridinyl)ethyl]aminophenyl]-6-methylnicotinamide 689151-94-8P, 2-[Ethyl(methyl)amino]-6-methyl-N-[4-[(2-(2-pyridinyl)ethyl)aminolphenyl]nicotinamide 689152-07-6P,
 N-[4-[Formyl[2-(2-pyridinyl)ethyl]aminophenyl]-2,6-bis(4-methyl-1-piperidinyl)nicotinamide 689152-15-6P, 2,6-Bis(4-methyl-1-piperidinyl)-N-[4-[(2-(2-pyridinyl)ethyl)aminophenyl]nicotinamide 689152-26-9P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[(2-(2-pyridinyl)ethyl)amino]-3-pyridinyl]nicotinamide 689152-33-8P, 6-Methyl-2-(1-piperidinyl)-N-[6-[(2-(2-pyridinyl)ethyl)amino]-3-pyridinyl]nicotinamide 689152-48-5P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[3-(2-pyridinyl)propanoyl]phenyl]nicotinamide 689152-55-4P,
 N-[4-[1-Hydroxy-3-(2-pyridinyl)propyl]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689152-62-3P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[3-(2-pyridinyl)propyl]phenyl]nicotinamide 689153-63-7P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-oxo-2-(2-pyridinylamino)ethyl]phenyl]nicotinamide 689153-72-8P,
 2-(Dimethylamino)-4-methyl-N-[4-[2-oxo-2-(2-pyridinylamino)ethyl]phenyl]benzamide 689153-78-4P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-oxo-2-(2-pyridinylamino)ethyl]phenyl]benzamide 689153-85-3P,
 N-[4-[[6-Methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]benzyl]-2-pyridinecarboxamide 689153-90-0P,
 N-[4-[[4-Methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]benzyl]-2-pyridinecarboxamide 689153-95-5P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]nicotinamide 689154-01-6P,
 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-pyrazol-1-

yl)ethoxy]phenyl]benzamide 689154-08-3P, 2-(Dimethylamino)-4-methyl-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]benzamide 689154-16-3P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-1,2,4-triazol-1-yl)ethoxy]phenyl]nicotinamide 689154-23-2P, 4-Chloro-2-(dimethylamino)-N-[4-[2-(1H-1,2,4-triazol-1-yl)ethoxy]phenyl]benzamide 689154-30-1P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-1,2,4-triazol-1-yl)ethyl]amino]phenyl]nicotinamide 689154-37-8P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-1,2,4-triazol-1-yl)ethyl]amino]phenyl]benzamide 689154-43-6P, 2-(Dimethylamino)-4-methyl-N-[4-[2-(1H-1,2,4-triazol-1-yl)ethyl]amino]phenyl]benzamide 689154-49-2P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[3-(1H-1,2,4-triazol-1-yl)propyl]phenyl]nicotinamide 689154-57-2P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[2-(1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]nicotinamide 689154-62-9P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[2-(1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]benzamide 689154-66-3P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-(1H-pyrrol-1-yl)ethoxy]phenyl]nicotinamide 689154-85-6P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-4-methyl-2-(4-methyl-1-piperidinyl)benzamide 689154-89-0P, tert-Butyl N-[2-[2-(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl] [4-[2-(dimethylamino)-4-methylbenzoyl]amino]phenyl]carbamate 689154-96-9P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-2-(dimethylamino)-4-methylbenzamide 689155-08-6P, N-[4-[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-4-methyl-2-(4-methyl-1-piperidinyl)benzamide 689155-12-2P, tert-Butyl [6-[2-[4-[2-(dimethylamino)-4-methylbenzoyl]amino]phenyl]amino]ethyl]-2-pyridinyl]carbamate 689155-17-7P, N-[4-[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-2-(dimethylamino)-4-methylbenzamide 689155-39-3P, N-[4-[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689155-45-1P, tert-Butyl N-[2-[6-[2-(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl] [4-[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenyl]carbamate 689155-50-8P, N-[4-[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-2-(dimethylamino)-6-methylnicotinamide 689155-66-6P, tert-Butyl [6-[2-[4-[2-(6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl)carbonyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate 689155-72-4P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689155-79-1P, tert-Butyl [6-[2-[4-[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate 689155-86-0P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-2-(dimethylamino)-6-methylnicotinamide 689155-99-5P, tert-Butyl N-[2-[2-[2-(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl] [4-[2-(6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl)carbonyl]amino]phenyl]carbamate 689156-04-5P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689156-09-0P, tert-Butyl N-[2-[2-[2-(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl] [4-[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenyl]carbamate 689156-16-9P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-2-(dimethylamino)-6-methylnicotinamide 689156-30-7P, tert-Butyl [4-[2-[4-[2-(6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl)carbonyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate 689156-36-3P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689156-43-2P, tert-Butyl [4-[2-[4-[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate 689156-48-7P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]phenyl]-2-(dimethylamino)-6-methylnicotinamide 689156-60-3P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]phenyl]-4-methyl-2-(4-methyl-1-piperidinyl)benzamide 689156-66-9P, tert-Butyl

[4-[2-[4-[[2-(dimethylamino)-4-methylbenzoyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate 689156-73-8P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]phenyl]-2-(dimethylamino)-4-methylbenzamide 689156-78-3P, tert-Butyl [4-[2-[[5-[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]-2-pyridinyl]oxy]ethyl]-1,3-thiazol-2-yl]carbamate 689156-84-1P, N-[6-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]-3-pyridinyl]-4-methyl-2-(4-methyl-1-piperidinyl)benzamide 689156-89-6P, tert-Butyl [4-[2-[[5-[2-(dimethylamino)-4-methylbenzoyl]amino]-2-pyridinyl]oxy]ethyl]-1,3-thiazol-2-yl]carbamate 689156-95-4P, N-[6-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]-3-pyridinyl]-2-(dimethylamino)-4-methylbenzamide 689157-07-1P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-4-methyl-2-(4-methyl-1-piperidinyl)benzamide 689157-14-0P, tert-Butyl [6-[2-[4-[[2-(dimethylamino)-4-methylbenzoyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate 689157-19-5P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-2-(dimethylamino)-4-methylbenzamide 689157-26-4P, tert-Butyl [6-[2-[4-[[2-(dimethylamino)benzoyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate 689157-32-2P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-2-(dimethylamino)benzamide 689157-39-9P, tert-Butyl N-[2-[6-[(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl]-4-[[2-(dimethylamino)benzoyl]amino]phenoxy]ethyl]carbamate 689157-44-6P, N-[4-[[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-2-(dimethylamino)benzamide 689157-49-1P, tert-Butyl N-[2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl]-4-[[2-(dimethylamino)benzoyl]amino]phenoxy]ethyl]carbamate 689157-55-9P, N-[4-[[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-2-(dimethylamino)benzamide 689157-62-8P, tert-Butyl [4-[2-[4-[[2-(dimethylamino)benzoyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl]carbamate 689157-69-5P, N-[4-[2-(2-Amino-1,3-thiazol-4-yl)ethoxy]phenyl]-2-(dimethylamino)benzamide 689158-14-3P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689158-19-8P, tert-Butyl N-[4-[[2-(dimethylamino)benzoyl]amino]phenyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-26-7P, 2-(Dimethylamino)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689158-33-6P, tert-Butyl N-[4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-41-6P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]nicotinamide 689158-56-3P, 2-(Dimethylamino)-4-methyl-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689158-99-4P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[6-[[2-(1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]benzamide 689159-13-5P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-(2-pyridinylacetyl)-2,3-dihydro-1H-isoindol-5-yl]nicotinamide 689159-19-1P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-(2-pyridinylacetyl)-2,3-dihydro-1H-isoindol-5-yl]benzamide 689159-33-9P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-(phenylacetyl)-2,3-dihydro-1H-isoindol-5-yl]nicotinamide 689159-49-7P, N-[4-[(6-Amino-2-pyridinyl)acetyl]amino]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689159-91-9P, N-[4-[2-(3-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689160-07-4P 689160-14-3P, 2-(Dimethylamino)-4-methyl-N-[4-[(1H-pyrazol-1-ylacetyl)amino]phenyl]benzamide 689160-34-7P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689160-39-2P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689160-45-0P, 2-(Dimethylamino)-4-methyl-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689160-51-8P, 4-Chloro-2-(dimethylamino)-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-

yl]benzamide 689160-57-4P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(1H-tetrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide
 689160-67-6P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]nicotinamide 689160-72-3P,
 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]benzamide 689160-77-8P, 2-(Dimethylamino)-4-methyl-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]benzamide 689160-85-8P, 4-Chloro-2-(dimethylamino)-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]benzamide 689160-91-6P,
 2,3-Dimethyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689160-98-3P, 2,4-Dimethyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-04-4P, N-[1-(2-Pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2,4-bis(trifluoromethyl)benzamide 689161-11-3P,
 N-[1-(2-Pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-2,5-bis(trifluoromethyl)benzamide 689161-43-1P, N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-2-isopropoxy-4-methylbenzamide 689161-55-5P, N-[1-[(2-Amino-1,3-thiazol-4-yl)acetyl]-2,3-dihydro-1H-indol-5-yl]-2-isopropoxy-4-methylbenzamide 689161-62-4P,
 2-Isopropoxy-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-68-0P, 4-Chloro-2-isopropoxy-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-80-6P,
 2-Isopropoxy-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-87-3P, 2-Methoxy-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-92-0P, 2-Methoxy-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689161-98-6P, 2-Ethoxy-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide
 689162-18-3P, 4-Acetyl-2-(dimethylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-31-0P,
 2-[Acetyl(methyl)amino]-N-[4-[formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-4-methylbenzamide 689162-36-5P, 2-[Acetyl(methyl)amino]-4-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-42-3P,
 4-Methyl-2-(methylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-48-9P, 4-Chloro-2-(methylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-54-7P,
 2-Amino-4-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-66-1P, 2-(Dimethylamino)-4,5-dimethoxy-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]benzamide 689162-80-9P,
 1-Methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-1,2,3,4-tetrahydro-8-quinolinecarboxamide 689162-97-8P, 1-Ethyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-1,2,3,4-tetrahydro-8-quinolinecarboxamide 689163-13-1P, 5-Chloro-1-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-1,2,3,4-tetrahydro-8-quinolinecarboxamide 689163-18-6P,
 N-[4-[[2-(2-Pyridinyl)ethyl]amino]phenyl]-8-quinolinecarboxamide 689163-81-3P, tert-Butyl [4-[[6-methyl-2-(methylamino)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689163-87-9P, 6-Methyl-2-(methylamino)-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689163-92-6P,
 2-(Cyclohexylamino)-N-[4-[formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-6-methylnicotinamide 689163-99-3P, 2-(Cyclohexylamino)-6-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689164-06-5P, tert-Butyl [4-[[2-(isopropylamino)-6-methyl-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689164-13-4P, 2-(Isopropylamino)-6-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689164-21-4P,
 tert-Butyl [4-[[6-methyl-2-(1,3-thiazolidin-3-yl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(2-pyridinyl)ethyl]carbamate 689164-28-1P, 6-Methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]-2-(1,3-thiazolidin-3-yl)nicotinamide 689164-35-0P, 1-Methyl-N-[4-[2-oxo-2-(2-

pyridinylamino)ethyl]phenyl]-1,2,3,4-tetrahydro-8-quinolinecarboxamide
 689164-37-2P, 1-Methyl-N-[4-[(2-pyridinylcarbonyl)amino]methyl]phenyl]-
 1,2,3,4-tetrahydro-8-quinolinecarboxamide 689164-44-1P,
 1-Methyl-N-[4-[2-(1-pyrazolyl)ethoxy]phenyl]-1,2,3,4-tetrahydro-8-
 quinolinecarboxamide 689164-49-6P, 2-Isopropoxy-4-methyl-N-[4-[2-(1H-
 pyrazol-1-yl)ethoxy]phenyl]benzamide 689164-55-4P, 2-Isopropoxy-4-
 methyl-N-[4-[(2-(1H-1,2,4-triazol-1-yl)ethyl)amino]phenyl]benzamide
 689164-60-1P, tert-Butyl N-[4-[(2-isopropoxy-6-methyl-3-
 pyridinyl)carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate
 689164-65-6P, 2-Isopropoxy-6-methyl-N-[4-[[2-(2-
 pyridinyl)ethyl]amino]phenyl]nicotinamide 689164-71-4P,
 2,6-Diisopropoxy-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide
 689164-77-0P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-2-
 (isopropylthio)-6-methylnicotinamide 689164-82-7P, 2-(Isopropylthio)-6-
 methyl-N-[4-[(2-(2-pyridinyl)ethyl)amino]phenyl]nicotinamide
 689164-88-3P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-6-methyl-2-
 (propylthio)nicotinamide 689164-93-0P, 6-Methyl-2-(propylthio)-N-[4-[[2-
 (2-pyridinyl)ethyl]amino]phenyl]nicotinamide
 (Apo B inhibitor; preparation of amides as apolipoprotein B secretion
 inhibitors)

IT 689164-97-4P, tert-Butyl N-[4-[[6-methyl-2-(methylthio)-3-
 pyridinyl)carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate
 689165-03-5P, 6-Methyl-2-(methylthio)-N-[4-[[2-(2-
 pyridinyl)ethyl]amino]phenyl]nicotinamide 689165-08-0P,
 N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-2,6-
 bis(methylthio)nicotinamide 689165-16-0P, 2,6-Bis(methylthio)-N-[4-[[2-
 (2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689165-23-9P,
 N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-2-isopropoxy-4-
 methylbenzamide 689165-30-8P, 2-Isopropoxy-4-methyl-N-[4-[[2-(2-
 pyridinyl)ethyl]amino]phenyl]benzamide 689165-36-4P,
 4-Chloro-N-[4-[formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-2-
 isopropoxybenzamide 689165-42-2P, 4-Chloro-2-isopropoxy-N-[4-[[2-(2-
 pyridinyl)ethyl]amino]phenyl]benzamide 689165-55-7P,
 N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-2-isopropoxy-4-
 methylbenzamide 689165-62-6P, tert-Butyl [2-[6-[(tert-
 butoxycarbonyl)amino]-2-pyridinyl]ethyl][4-[(2-isopropoxy-4-
 methylbenzoyl)amino]phenyl]carbamate 689165-68-2P, N-[4-[[2-(6-Amino-2-
 pyridinyl)ethyl]amino]phenyl]-2-isopropoxy-4-methylbenzamide
 689165-74-0P, tert-Butyl N-[2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-
 4-yl]ethyl][4-[(2-isopropoxy-4-methylbenzoyl)amino]phenyl]carbamate
 689165-78-4P, N-[4-[[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-2-
 isopropoxy-4-methylbenzamide 689165-89-7P, N-[4-[[2-(2-Amino-1,3-thiazol-
 4-yl)ethoxy]phenyl]-2-isopropoxy-4-methylbenzamide 689166-17-4P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[2-[(1H-1,2,4-triazol-3-yl)methyl]-
 1,2,3,4-tetrahydro-6-isoquinolinyl]nicotinamide 689166-22-1P,
 N-[2-(4-Cyanobenzyl)-1,2,3,4-tetrahydro-6-isoquinolinyl]-6-methyl-2-(4-
 methyl-1-piperidinyl)nicotinamide 689166-38-9P, 2-(Dimethylamino)-6-
 methyl-N-[2-[(1-trityl-1H-1,2,4-triazol-3-yl)methyl]-1,2,3,4-tetrahydro-6-
 isoquinolinyl]nicotinamide 689166-44-7P, 2-(Dimethylamino)-6-methyl-N-[
 2-(1H-1,2,4-triazol-3-ylmethyl)-1,2,3,4-tetrahydro-6-
 isoquinolinyl]nicotinamide 689166-73-2P, 2-Isopropoxy-4-methyl-N-[2-(1H-
 1,2,4-triazol-3-ylmethyl)-1,2,3,4-tetrahydro-6-isoquinolinyl]benzamide
 689166-91-4P, 2-(Dimethylamino)-N-[2-[(1-trityl-1H-1,2,4-triazol-3-
 yl)methyl]-1,2,3,4-tetrahydro-6-isoquinolinyl]benzamide 689166-96-9P,
 2-(Dimethylamino)-N-[2-(1H-1,2,4-triazol-3-ylmethyl)-1,2,3,4-tetrahydro-6-
 isoquinolinyl]benzamide 689167-08-6P, 2-(4-Methylphenyl)-N-[4-[[2-(1H-
 pyrazol-1-yl)ethyl]amino]phenyl]-1-cyclohexene-1-carboxamide

689167-19-9P, N-[4-[(2-(1H-Pyrazol-1-yl)ethyl)amino]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689167-25-7P, tert-Butyl N-[4-[(4'-methyl-1,1'-biphenyl-2-yl)carbonyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl] carbamate 689167-31-5P, 4'-Methyl-N-[4-[(2-(1H-pyrazol-1-yl)ethyl)amino]phenyl]-1,1'-biphenyl-2-carboxamide 689167-41-7P, 4'-Ethyl-N-[4-[(2-(1H-pyrazol-1-yl)ethyl)amino]phenyl]-1,1'-biphenyl-2-carboxamide 689167-47-3P, tert-Butyl N-[4-[(2-isopropoxy-4-methylbenzoyl)amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl] carbamate 689167-52-0P, 2-Isopropoxy-4-methyl-N-[4-[(2-(1H-pyrazol-1-yl)ethyl)amino]phenyl]benzamide 689167-58-6P, N-[2-[2-(Acetylamino)ethyl]-1,2,3,4-tetrahydro-6-isoquinolinyl]-2-isopropoxy-4-methylbenzamide 689167-66-6P, N-[2-[2-(Acetylamino)ethyl]-1,2,3,4-tetrahydro-6-isoquinolinyl]-2-(dimethylamino)benzamide 689167-71-3P, tert-Butyl N-[4-[[2-(4-methylphenyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl] carbamate 689167-75-7P, 2-(4-Methylphenyl)-N-[4-[(2-(1H-pyrazol-1-yl)ethyl)amino]phenyl]nicotinamide 689167-81-5P, tert-Butyl N-[4-[[2-(4-ethylphenyl)-3-pyridinyl]carbonyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl] carbamate 689167-88-2P, 2-(4-Ethylphenyl)-N-[4-[(2-(1H-pyrazol-1-yl)ethyl)amino]phenyl]nicotinamide 689168-02-3P, 2-(4-Methylphenyl)-N-[6-[(2-(1H-pyrazol-1-yl)ethyl)amino]-3-pyridinyl]-1-cyclohexene-1-carboxamide 689168-09-0P, tert-Butyl [5-[(2-isopropoxy-4-methylbenzoyl)amino]-2-pyridinyl] [2-(1H-pyrazol-1-yl)ethyl] carbamate 689168-13-6P, 2-Isopropoxy-4-methyl-N-[6-[(2-(1H-pyrazol-1-yl)ethyl)amino]-3-pyridinyl]benzamide 689168-20-5P, 2-(4-Methylphenyl)-N-[4-[(2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1-cyclohexene-1-carboxamide 689168-25-0P, N-[4-[(2-(1H-Pyrazol-1-yl)ethoxy]phenyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689168-30-7P, 2-[4-(Dimethylamino)phenyl]-N-[4-[(2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1-cyclohexene-1-carboxamide 689168-35-2P, 2-(4-Methylphenyl)-N-[6-[(2-(1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]-1-cyclohexene-1-carboxamide 689168-41-0P, N-[6-[(2-(1H-Pyrazol-1-yl)ethoxy]-3-pyridinyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689168-49-8P, 2-(4-Methylphenyl)-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenyl]-1-cyclohexene-1-carboxamide 689168-56-7P, N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689168-62-5P, 2-(4-Methylphenyl)-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethyl)amino]phenyl]-1-cyclohexene-1-carboxamide 689168-69-2P, N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethyl)amino]phenyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689168-75-0P, N-[4-[(2-(1H-1,2,4-Triazol-1-yl)propyl)phenyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689168-81-8P, 4'-(Dimethylamino)-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689168-86-3P, N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethyl)amino]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689168-92-1P, 4'-Methyl-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethyl)amino]phenyl]-1,1'-biphenyl-2-carboxamide 689168-98-7P, 5-Methyl-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethyl)amino]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689169-05-9P, 4',6-Dimethyl-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-11-7P, 4',5-Dimethyl-N-[4-[(2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-17-3P, N-[4-[(2-(1H-Pyrazol-1-yl)ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689169-24-2P, 4'-(Dimethylamino)-N-[4-[(2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-28-6P, N-[6-[(2-(1H-Pyrazol-1-yl)ethoxy]-3-pyridinyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689169-34-4P, 4',5-Dimethyl-N-[6-[(2-(1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]-1,1'-biphenyl-2-carboxamide 689169-41-3P,

4',5-Dimethyl-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-46-8P, 4'-Methoxy-5-methyl-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-51-5P, 4'-Chloro-5-methyl-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-56-0P, 4'- (Dimethylamino)-5-methyl-N-[4-[2-(1H-pyrazol-1-yl)ethoxy]phenyl]-1,1'-biphenyl-2-carboxamide 689169-60-6P, N-[4-[3-(1H-1,2,4-Triazol-1-yl)propyl]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689169-64-0P, 4'- (Dimethylamino)-N-[4-[3-(1H-1,2,4-triazol-1-yl)propyl]phenyl]-1,1'-biphenyl-2-carboxamide 689169-78-6P, N-[4-[2-(1H-Pyrrol-1-yl)ethoxy]phenyl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689169-84-4P, N-[4-[2-(1H-Pyrrol-1-yl)ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689169-95-7P, N-[1-(1H-Imidazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689170-01-2P, N-[1-(1H-1,2,4-Triazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689170-24-9P, 2-Isopropoxy-4-methyl-N-[2-(2-pyridinylacetyl)-2,3-dihydro-1H-isoindol-5-yl]benzamide 689170-54-5P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-2-methyl-4-(4-methyl-1-piperidinyl)-5-pyrimidinecarboxamide 689170-59-0P, 2-Methyl-4-(4-methyl-1-piperidinyl)-N-[4-[2-(2-pyridinyl)ethyl]amino]phenyl]-5-pyrimidinecarboxamide 689170-73-8P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-4-(4-methyl-1-piperidinyl)-2-(trifluoromethyl)-5-pyrimidinecarboxamide 689170-79-4P, 4-(4-Methyl-1-piperidinyl)-N-[4-[2-(2-pyridinyl)ethyl]amino]phenyl]-2-(trifluoromethyl)-5-pyrimidinecarboxamide 689170-94-3P, N-[4-[Formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-4-(4-methyl-1-piperidinyl)-2-(methylthio)-5-pyrimidinecarboxamide 689170-99-8P, 4-(4-Methyl-1-piperidinyl)-2-(methylthio)-N-[4-[2-(2-pyridinyl)ethyl]amino]phenyl]-5-pyrimidinecarboxamide 689171-10-6P, N-[4-[2-(3-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689171-35-5P, N-[4-[2-[5-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689171-41-3P, N-[4-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689171-46-8P, N-[4-[(1H-Pyrazol-1-ylacetyl)amino]phenyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689171-53-7P, 2-(4-Methylphenyl)-N-[4-[(1H-pyrazol-1-ylacetyl)amino]phenyl]-1-cyclohexene-1-carboxamide 689171-58-2P, N-[1-(1H-Pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689171-63-9P, 4'-Methyl-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1,1'-biphenyl-2-carboxamide 689171-67-3P, 4'- (Dimethylamino)-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1,1'-biphenyl-2-carboxamide 689171-73-1P, 2-(4-Methylphenyl)-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1-cyclohexene-1-carboxamide 689171-80-0P, 2-[4-(Dimethylamino)phenyl]-N-[1-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1-cyclohexene-1-carboxamide 689172-08-5P, 2-(4-Methylphenyl)-N-[1-(1H-1,2,4-triazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1-cyclohexene-1-carboxamide 689172-15-4P, N-[1-(1H-Tetrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689172-34-7P, 4'- (Dimethylamino)-N-[1-(1H-tetrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1,1'-biphenyl-2-carboxamide 689172-42-7P, 2-(4-Methylphenyl)-N-[1-(1H-tetrazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-1-cyclohexene-1-carboxamide 689172-48-3P, 2-(4-Methylphenyl)-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]-1-cyclohexene-1-carboxamide 689172-54-1P, N-[2-(1H-Pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]-2-[4-(trifluoromethyl)phenyl]-1-cyclohexene-1-carboxamide 689172-60-9P,

2-[4-(Dimethylamino)phenyl]-N-[2-(1H-pyrazol-1-ylacetyl)-2,3-dihydro-1H-isoindol-5-yl]-1-cyclohexene-1-carboxamide 689172-67-6P,
N-(1-Acetyl-2,3-dihydro-1H-indol-5-yl)-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689172-73-4P, tert-Butyl [6-[2-[5-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl]-2-pyridinylcarbamate 689172-81-4P,
N-[1-[(6-Amino-2-pyridinyl)acetyl]-2,3-dihydro-1H-indol-5-yl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689172-88-1P, 2-(Isopropylamino)-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689172-95-0P, 2-(Cyclohexylamino)-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689172-99-4P, 2-(Ethylmethylamino)-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-05-5P, 2-(Diethylamino)-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-10-2P, N-[1-[(6-Acetylamino)-2-pyridinyl)methyl]-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-16-8P, N-[1-[(6-Amino-2-pyridinyl)methyl]-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-21-5P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(2-pyridinyl)methyl]-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-32-8P, N-[1-(1H-Imidazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689173-38-4P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-(1H-1,2,4-triazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-43-1P, N-(1-Acetyl-2,3-dihydro-1H-indol-5-yl)-2-isopropoxy-4-methylbenzamide 689173-55-5P, 2-Isopropoxy-4-methyl-N-[1-(1H-1,2,4-triazol-1-ylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689173-75-9P, 6-Methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-89-5P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[1-[2-(2-pyridinyl)ethyl]-2,3-dihydro-1H-indol-5-yl]nicotinamide 689174-06-9P, 2-Isopropoxy-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689174-25-2P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[4-[(1H-pyrrol-2-yl)methyl]-1-piperazinyl]phenyl]nicotinamide 689174-32-1P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[4-[(2-thienyl)methyl]-1-piperazinyl]phenyl]nicotinamide 689174-38-7P, N-[4-[4-(2-Furylmethyl)-1-piperazinyl]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689174-57-0P, 2-Isopropoxy-4-methyl-N-[4-[4-(1H-pyrrol-2-ylmethyl)-1-piperazinyl]phenyl]benzamide 689174-63-8P, N-[4-[4-(3-Cyanobenzyl)-1-piperazinyl]phenyl]-2-isopropoxy-4-methylbenzamide 689174-76-3P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[3-oxo-2-[2-(2-pyridinyl)ethyl]-2,3-dihydro-1H-isoindol-5-yl]nicotinamide 689174-98-9P, 2-(Dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-3-(trifluoromethyl)benzamide 689175-03-9P, 2-(Dimethylamino)-3-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-09-5P, 2-(Dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-4-(trifluoromethyl)benzamide 689175-16-4P, 4-Chloro-2-(dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-21-1P, 2-(Dimethylamino)-4-fluoro-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-26-6P, 2-(Dimethylamino)-4-ethyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-32-4P, 2-(Dimethylamino)-4-isopropyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-37-9P, 4-tert-Butyl-2-(dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-43-7P, 2-(Dimethylamino)-4-methoxy-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-48-2P, 4-Acetyl-2-(dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-53-9P, 2-(Dimethylamino)-5-methyl-N-[1-(2-

pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-59-5P,
5-Chloro-2-(dimethylamino)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-
5-yl]benzamide 689175-64-2P, 2-(Dimethylamino)-4,5-dimethoxy-N-[1-(2-
pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689175-70-0P,
2-(Diethylamino)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-
yl]benzamide 689175-80-2P, 2-Amino-4-methyl-N-[1-(2-pyridinylacetyl)-
2,3-dihydro-1H-indol-5-yl]benzamide 689175-83-5P, 4-Methoxy-2-(4-methyl-
1-piperidinyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-
yl]benzamide 689175-88-0P, 1-Methyl-N-[1-(2-pyridinylacetyl)-2,3-
dihydro-1H-indol-5-yl]-1,2,3,4-tetrahydro-8-quinolinecarboxamide
689175-95-9P, 1-Ethyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-
1,2,3,4-tetrahydro-8-quinolinecarboxamide 689176-03-2P,
5-Chloro-1-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]-
1,2,3,4-tetrahydro-8-quinolinecarboxamide 689176-21-4P,
3-(Dimethylamino)-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-
5-yl]-2-thiophenecarboxamide 689176-28-1P, 2-Isopropyl-4-methyl-N-[1-(2-
pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689176-35-0P,
2-Isopropenyl-4-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-
yl]benzamide 689176-42-9P, 2-tert-Butyl-4-methyl-N-[1-(2-
pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689176-47-4P,
4-Chloro-2-cyclohexyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-
yl]benzamide 689176-53-2P, 2-Cyclohexyl-N-[1-(2-pyridinylacetyl)-2,3-
dihydro-1H-indol-5-yl]benzamide 689176-61-2P, 2-(Methylthio)-N-[1-(2-
pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689176-67-8P,
2-(Methylsulfonyl)-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-
yl]benzamide 689176-71-4P, 4-Methyl-2-(methylthio)-N-[1-(2-
pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689176-78-1P,
2-Isopropyl-4-methyl-N-[4-[(2-pyridinyl)ethyl]amino]phenyl]benzamide
689176-86-1P, 2-(Methylthio)-N-[4-[(2-pyridinyl)ethyl]amino]phenyl]ben-
zamide 689176-94-1P, 4-Methyl-2-(methylthio)-N-[4-[(2-pyridinyl)
ethyl]amino]phenyl]benzamide 689177-17-1P,
4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[(2-
pyridinylamino)carbonyl]phenyl]benzamide 689177-24-0P,
4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(2-
pyridinyl)methyl]amino]carbonyl]phenyl]benzamide 689177-32-0P
689177-38-6P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(2-
pyridinyl)ethyl]amino]carbonyl]phenyl]benzamide 689177-46-6P,
4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(1-(2-
pyridinyl)ethyl]amino]carbonyl]phenyl]benzamide 689177-66-0P,
2-(Dimethylamino)-4-methyl-N-[4-[[[(2-pyridinyl)ethyl]amino]carbonyl]ph-
enyl]benzamide 689177-74-0P, 2-(Dimethylamino)-4-methyl-N-[4-[[[(1-(2-
pyridinyl)ethyl]amino]carbonyl]phenyl]benzamide 689177-95-5P,
6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(1-(2-
pyridinyl)ethyl]amino]carbonyl]phenyl]nicotinamide 689178-02-7P,
4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(2-
pyridinyl)propanoyl]amino]phenyl]benzamide 689178-07-2P,
6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(2-
pyridinyl)propanoyl]amino]phenyl]nicotinamide 689178-10-7P,
3-(Dimethylamino)-4-methyl-N-[4-[[[(2-pyridinyl)ethyl]amino]phenyl]-2-
thiophenecarboxamide 689178-15-2P, 4-Ethyl-2-(methylamino)-N-[4-[[[(2-
pyridinyl)ethyl]amino]phenyl]benzamide 689178-39-0P,
N-[4-[(5-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-4-chloro-2-
(dimethylamino)benzamide 689178-60-7P, N-[4-[(5-Amino-1H-pyrazol-1-
yl)ethoxy]phenyl]-2-(4-methylphenyl)-1-cyclohexene-1-carboxamide
689178-67-4P, 4-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[[[(5-
tritylamino)-1H-pyrazol-1-yl]ethoxy]phenyl]benzamide 689178-74-3P,
N-[4-[(5-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-4-methyl-2-(4-methyl-1-

piperidinyl)benzamide 689178-80-1P, 2-(Dimethylamino)-4-methyl-N-[4-[2-[5-(tritylamino)-1H-pyrazol-1-yl]ethoxy]phenyl]benzamide 689178-88-9P,
 N-[4-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-2-(dimethylamino)-4-methylbenzamide 689178-95-8P, 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-[2-[5-(tritylamino)-1H-pyrazol-1-yl]ethoxy]phenyl]nicotinamide
 689179-02-0P, N-[4-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689179-31-5P, N-[6-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]-4'-(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689179-41-7P, N-[6-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]-2-(4-methylphenyl)-cyclohexene-1-carboxamide 689179-46-2P
 , tert-Butyl N-[4-[[4-chloro-2-(dimethylamino)benzoyl]amino]phenyl][2-(1H-pyrazol-1-yl)ethyl]carbamate 689179-52-0P, 4-Chloro-2-(dimethylamino)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689179-60-0P,
 tert-Butyl [2-[6-[(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl][4-[[4-chloro-2-(dimethylamino)benzoyl]amino]phenyl]carbamate 689179-67-7P,
 N-[4-[[2-(6-Amino-2-pyridinyl)ethyl]amino]phenyl]-4-chloro-2-(dimethylamino)benzamide 689179-74-6P, tert-Butyl [6-[2-[4-[[4-chloro-2-(dimethylamino)benzoyl]amino]phenoxy]ethyl]-2-pyridinyl]carbamate
 689179-81-5P, N-[4-[2-(6-Amino-2-pyridinyl)ethoxy]phenyl]-4-chloro-2-(dimethylamino)benzamide 689179-88-2P, tert-Butyl [2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl][4-[[4-chloro-2-(dimethylamino)benzoyl]amino]phenyl]carbamate 689179-93-9P,
 N-[4-[[2-(2-Amino-1,3-thiazol-4-yl)ethyl]amino]phenyl]-4-chloro-2-(dimethylamino)benzamide 689180-11-8P, N-[4-[[2-(3-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-4-chloro-2-(dimethylamino)benzamide
 689180-47-0P, N-[6-[[2-(3-Amino-1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]-4-chloro-2-(dimethylamino)benzamide 689181-00-8P, N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-4-chloro-2-(dimethylamino)benzamide
 689181-09-7P, tert-Butyl [4-[[2-(dimethylamino)-4-methylbenzoyl]amino]phenyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689181-17-7P, N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-2-(dimethylamino)-4-methylbenzamide
 689181-26-8P, tert-Butyl [4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]phenyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689181-30-4P, N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide
 689181-37-1P, tert-Butyl N-[4-[[2-(4-methylphenyl)-1-cyclohexen-1-yl]carbonyl]amino]phenyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689181-43-9P, N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-2-(4-methylphenyl)-1-cyclohexene-1-carboxamide
 689181-48-4P, tert-Butyl [4-[[4'-methyl-1,1'-biphenyl-2-yl]carbonyl]amino]phenyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689181-54-2P, N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-4'-methyl-1,1'-biphenyl-2-carboxamide
 689181-86-0P, N-[6-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]-4-chloro-2-(dimethylamino)benzamide 689181-92-8P, tert-Butyl N-[5-[[2-(4-methylphenyl)-1-cyclohexen-1-yl]carbonyl]amino]-2-pyridinyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate
 689181-97-3P, N-[6-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]-2-(4-methylphenyl)-1-cyclohexene-1-carboxamide 689182-03-4P, tert-Butyl [5-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]-2-pyridinyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate
 689182-07-8P, N-[6-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689182-13-6P, tert-Butyl [5-[[4'-methyl-1,1'-biphenyl-2-yl]carbonyl]amino]-2-pyridinyl][2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate
 689182-18-1P, N-[6-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]-3-pyridinyl]-

4'-methyl-1,1'-biphenyl-2-carboxamide 689182-25-0P, tert-Butyl
 [4-[[2-(dimethylamino)-4-(trifluoromethyl)benzoyl]amino]phenyl] [2-[5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689182-30-7P,
 N-[4-[[2-(5-Amino-1H-pyrazol-1-yl)ethyl]amino]phenyl]-2-(dimethylamino)-4-(trifluoromethyl)benzamide 689182-47-6P, N-[6-[2-(5-Amino-1H-pyrazol-1-yl)ethoxy]-3-pyridinyl]-4-chloro-2-(dimethylamino)benzamide 689182-57-8P, 4-Chloro-2-(dimethylamino)-N-[6-[2-(1H-pyrazol-1-yl)ethyl]amino]-3-pyridinylbenzamide 689182-69-2P,
 2-(Dimethylamino)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]-4-(trifluoromethyl)benzamide 689182-75-0P, tert-Butyl
 [4-[[4-methyl-2-(methylamino)benzoyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689182-81-8P, 4-Methyl-2-(methylamino)-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689182-87-4P, tert-Butyl
 [4-[[2-(dimethylamino)-4-ethylbenzoyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689182-93-2P, 2-(Dimethylamino)-4-ethyl-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide 689182-99-8P, tert-Butyl
 [4-[[2-(dimethylamino)-4-fluorobenzoyl]amino]phenyl] [2-(1H-pyrazol-1-yl)ethyl]carbamate 689183-05-9P, 2-(Dimethylamino)-4-fluoro-N-[4-[[2-(1H-pyrazol-1-yl)ethyl]amino]phenyl]benzamide
 (Apo B inhibitor; preparation of amides as apolipoprotein B secretion inhibitors)

IT 17329-87-2P, 2-Chloro-N-(4-nitrophenyl)acetamide 32570-89-1P,
 2-(2,5-Dimethyl-1H-pyrrol-1-yl)-6-methylpyridine 56041-61-3P,
 1-[3-(Dimethylamino)-4-hydroxyphenyl]ethanone 65219-98-9P,
 2-(Dimethylamino)-4-methylbenzoic acid 73725-47-0P,
 1-(3-Phenylpropyl)-1H-1,2,4-triazole 77265-65-7P, 5-Chloro-2-(dimethylamino)benzoic acid 78251-76-0P, 4-Chloro-2-(1-piperidinyl)benzoic acid 79249-70-0P, 4-tert-Butyl-2-(dimethylamino)phenol 80200-20-0P, 2-(1H-Pyrazol-1-yl)ethyl
 4-methylbenzenesulfonate 83655-68-9P, 6-Methyl-2-(1-piperidinyl)nicotinic acid 84407-13-6P, 2-(3-Amino-1H-pyrazol-1-yl)ethanol 85003-06-1P, 5-Nitro-2-[2-(2-pyridinyl)ethoxy]pyridine 86256-03-3P, 2-[2-(4-Nitroanilino)ethyl]pyridine 87866-11-3P,
 1-(Chloroacetyl)-5-nitroindoline 101395-71-5P, 2-(1H-Pyrazol-1-yl)ethylamine 155790-12-8P, 6-Methyl-2-(methylamino)nicotinic acid 161616-73-5P, Methyl 2-(dimethylamino)-3-methylbenzoate 175137-10-7P,
 Methyl 3-(dimethylamino)-4-methyl-2-thiophenecarboxylate 176326-65-1P,
 2-[5-(Tritylamino)-1H-pyrazol-1-yl]ethanol 210364-77-5P,
 1-[2-(4-Nitrophenoxy)ethyl]-1H-1,2,4-triazole 299402-52-1P,
 4-[3-(1H-1,2,4-Triazol-1-yl)propyl]phenylamine 299402-53-2P,
 1-[3-(4-Nitrophenyl)propyl]-1H-1,2,4-triazole 314268-42-3P,
 4-[2-(1H-1,2,4-Triazol-1-yl)ethoxy]phenylamine 320589-14-8P, Methyl 4-methyl-2-(1-pyrrolidinyl)benzoate 400851-88-9P, N-(4-Nitrophenyl)-2-(1H-pyrazol-1-yl)acetamide 408365-60-6P, tert-Butyl
 N-(4-nitrophenyl)-N-[2-(2-pyridinyl)ethyl]carbamate 408365-61-7P,
 tert-Butyl N-(4-aminophenyl)-N-[2-(2-pyridinyl)ethyl]carbamate 408368-14-9P, 6-[2-(2-Pyridinyl)ethoxy]-3-pyridinamine 474519-79-4P,
 5-Nitro-1-(2-pyridinylacetyl)indoline 474519-80-7P,
 1-(2-Pyridinylacetyl)-5-indolinamine 474519-89-6P, [6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetic acid 474522-19-5P, 1-[[6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetyl]-5-nitroindoline 474522-20-8P,
 1-[[6-(2,5-Dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetyl]-5-indolinamine 521064-80-2P, Methyl 5-chloro-2-(dimethylamino)benzoate 689140-09-8P,
 4-Methyl-2-(1-pyrrolidinyl)benzoic acid 689140-22-5P, Benzyl 4-methyl-2-(1-piperidinyl)benzoate 689140-35-0P, 4-Methyl-2-(1-piperidinyl)benzoic acid 689140-49-6P, Benzyl 4-methyl-2-(4-methyl-1-piperidinyl)benzoate 689140-57-6P, 4-Methyl-2-(4-methyl-1-

piperidinyl)benzoic acid 689140-70-3P, Benzyl 2-(4,4-dimethyl-1-piperidinyl)-4-methylbenzoate 689140-77-0P, 2-(4,4-Dimethyl-1-piperidinyl)-4-methylbenzoic acid 689140-91-8P, Benzyl 4-methyl-2-(4-morpholinyl)benzoate 689140-98-5P, 4-Methyl-2-(4-morpholinyl)benzoic acid 689141-12-6P, Benzyl 4-methyl-2-(4-methyl-1-piperazinyl)benzoate 689141-18-2P, 4-Methyl-2-(4-methyl-1-piperazinyl)benzoic acid 689141-29-5P, Benzyl 4-methyl-2-(4-thiomorpholinyl)benzoate 689141-35-3P, 4-Methyl-2-(4-thiomorpholinyl)benzoic acid 689141-48-8P, 2-(1,1-Dioxido-4-thiomorpholinyl)-4-methylbenzoic acid 689141-62-6P, Benzyl 2-(hexahydro-1H-azepin-1-yl)-4-methylbenzoate 689141-67-1P, 2-(Hexahydro-1H-azepin-1-yl)-4-methylbenzoic acid 689141-78-4P, 2-(1-Piperidinyl)-4-(trifluoromethyl)benzonitrile 689141-85-3P, 2-(1-Piperidinyl)-4-(trifluoromethyl)benzoic acid 689141-95-5P, 4-Chloro-2-(1-piperidinyl)benzonitrile 689142-13-0P, 4-Methoxy-2-(1-piperidinyl)benzonitrile 689142-18-5P, 4-Methoxy-2-(1-piperidinyl)benzoic acid 689142-28-7P, Benzyl 5-methyl-2-(1-pyrrolidinyl)benzoate 689142-42-5P, 5-Methyl-2-(1-pyrrolidinyl)benzoic acid 689142-54-9P, Benzyl 5-methyl-2-(1-piperidinyl)benzoate 689142-60-7P, 5-Methyl-2-(1-piperidinyl)benzoic acid 689142-72-1P, 2-(1-Piperidinyl)-3-(trifluoromethyl)benzonitrile 689142-78-7P, 2-(1-Piperidinyl)-3-(trifluoromethyl)benzoic acid 689143-11-1P, 2-Nitro-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689143-16-6P, 2-Amino-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]benzamide 689143-37-1P, tert-Butyl 5-[[2-chloro-6-methyl-3-pyridinyl]carbonyl]amino]indoline-1-carboxylate 689143-48-4P, tert-Butyl 5-[[[6-methyl-2-(1-piperidinyl)-3-pyridinyl]carbonyl]amino]-1-indolinecarboxylate 689143-53-1P, N-(2,3-Dihydro-1H-indol-5-yl)-6-methyl-2-(1-piperidinyl)nicotinamide 689143-69-9P, tert-Butyl 5-[[[6-methyl-2-(4-methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]-1-indolinecarboxylate 689143-75-7P, N-(2,3-Dihydro-1H-indol-5-yl)-6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689143-85-9P, 2-Chloro-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689144-02-3P, 2-Chloro-N-(2,3-dihydro-1H-indol-5-yl)-6-methylnicotinamide 689144-07-8P, 2-Chloro-6-methyl-N-[1-(2-pyridinylacetyl)-2,3-dihydro-1H-indol-5-yl]nicotinamide 689144-30-7P, tert-Butyl 5-[[2-(dimethylamino)-6-methyl-3-pyridinyl]carbonyl]amino]-1-indolinecarboxylate 689144-36-3P, N-(2,3-Dihydro-1H-indol-5-yl)-2-(dimethylamino)-6-methylnicotinamide 689145-14-0P, tert-Butyl N-[4-[[2-chloro-6-methyl-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689145-74-2P, tert-Butyl N-[4-[[2-chloro-3-pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate 689146-24-5P, 2-Chloro-6-methyl-N-[4-[[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689146-35-8P, 2-Chloro-6-methyl-N-[4-[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-56-3P, 2-Chloro-N-[4-[2-(2-pyridinyl)ethoxy]phenyl]nicotinamide 689146-79-0P, 2-Chloro-6-methyl-N-[6-[2-(2-pyridinyl)ethoxy]-3-pyridinyl]nicotinamide 689146-99-4P, 2-Chloro-N-[4-[4-(3-cyanobenzyl)-1-piperazinyl]phenyl]nicotinamide 689147-20-4P, 2-Chloro-N-[6-[4-(3-cyanobenzyl)-1-piperazinyl]-3-pyridinyl]-6-methylnicotinamide 689147-63-5P, Methyl 4-chloro-2-(dimethylamino)benzoate 689147-76-0P, 4-Chloro-2-(dimethylamino)benzoic acid 689148-02-5P, Methyl 2-(dimethylamino)-4-fluorobenzoate 689148-06-9P, 2-(Dimethylamino)-4-(trifluoromethyl)benzonitrile 689148-14-9P, 2-(Dimethylamino)-4-(trifluoromethyl)benzoic acid 689148-20-7P, 2-(Dimethylamino)-4-(trifluoromethyl)benzoic acid 689148-34-3P, Benzyl 2-(dimethylamino)-4-methoxybenzoate 689148-41-2P, 2-(Dimethylamino)-4-methoxybenzoic acid 689148-60-5P, 4-Acetyl-2-(dimethylamino)phenyl

trifluoromethanesulfonate 689148-65-0P, Methyl 4-acetyl-2-(dimethylamino)benzoate 689148-69-4P, Methyl 2-(dimethylamino)-4-(1-hydroxyethyl)benzoate 689148-76-3P, Methyl 2-(dimethylamino)-4-ethylbenzoate 689148-82-1P, 2-(Dimethylamino)-4-ethylbenzoic acid 689148-95-6P, Methyl 2-(dimethylamino)-4-isopropenylbenzoate 689149-02-8P, Methyl 2-(dimethylamino)-4-isopropylbenzoate 689149-07-3P, 2-(Dimethylamino)-4-isopropylbenzoic acid 689149-32-4P, 4-tert-Butyl-2-(dimethylamino)phenyl trifluoromethanesulfonate 689149-38-0P, Methyl 4-tert-butyl-2-(dimethylamino)benzoate 689149-44-8P, 4-tert-Butyl-2-(dimethylamino)benzoic acid 689149-77-7P, Benzyl 4-methoxy-2-(4-methyl-1-piperidinyl)benzoate 689149-84-6P, 4-Methoxy-2-(4-methyl-1-piperidinyl)benzoic acid 689150-01-4P, 2-(Dimethylamino)-3-methylbenzoic acid 689150-67-2P 689150-75-2P, 6-Methyl-2-(4-methyl-1-piperidinyl)nicotinic acid 689151-18-6P, 2-Chloro-N-[4-[formyl[2-(2-pyridinyl)ethyl]amino]phenyl]-6-methylnicotinamide 689152-01-0P, 2,6-Dichloro-N-[4-[formyl[2-(2-pyridinyl)ethyl]amino]phenyl]nicotinamide 689152-18-9P, 2-Chloro-6-methyl-N-[6-[[2-(2-pyridinyl)ethyl]amino]-3-pyridinyl]nicotinamide 689152-40-7P, 2-Chloro-6-methyl-N-[4-[3-(2-pyridinyl)propanoyl]phenyl]nicotinamide 689152-76-9P, 1-[2-(4-Nitrophenoxy)ethyl]-1H-pyrazole 689152-83-8P, 4-[2-(1H-Pyrazol-1-yl)ethoxy]phenylamine 689152-90-7P, 5-Nitro-2-[2-(1H-pyrazol-1-yl)ethoxy]pyridine 689152-97-4P, 6-[2-(1H-Pyrazol-1-yl)ethoxy]-3-pyridinamine 689153-26-2P, N-(4-Nitrophenyl)-N-[2-(1H-1,2,4-triazol-1-yl)ethyl]amine 689153-32-0P, N-[2-(1H-1,2,4-Triazol-1-yl)ethyl]-1,4-benzenediamine 689153-54-6P, 2-Chloro-6-methyl-N-[4-[2-oxo-2-(2-pyridinylamino)ethyl]phenyl]nicotinamide 689155-28-0P, tert-Butyl N-[2-[6-[(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl][4-[(2-chloro-6-methyl-3-pyridinyl)carbonyl]amino]phenyl carbamate 689155-58-6P, tert-Butyl [6-[2-[4-[(2-chloro-6-methyl-3-pyridinyl)carbonyl]amino]phenoxy]ethyl]-2-pyridinyl carbamate 689155-92-8P, tert-Butyl N-[2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-yl]ethyl][4-[(2-chloro-6-methyl-3-pyridinyl)carbonyl]amino]phenyl carbamate 689156-24-9P, tert-Butyl [4-[2-[4-[(2-chloro-6-methyl-3-pyridinyl)carbonyl]amino]phenoxy]ethyl]-1,3-thiazol-2-yl carbamate 689157-81-1P, 1-(2-Azidoethyl)-1H-pyrazole 689157-85-5P, N-(4-Nitrophenyl)-N-[2-(1H-pyrazol-1-yl)ethyl]amine 689157-92-4P, tert-Butyl N-(4-nitrophenyl)-N-[2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-00-7P, tert-Butyl N-(4-aminophenyl)-N-[2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-62-1P, 5-Nitro-N-[2-(1H-pyrazol-1-yl)ethyl]-2-pyridinamine 689158-76-7P, tert-Butyl N-(5-nitro-2-pyridinyl)-N-[2-(1H-pyrazol-1-yl)ethyl]carbamate 689158-82-5P, tert-Butyl N-(5-amino-2-pyridinyl)-N-[2-(1H-pyrazol-1-yl)ethyl]carbamate 689159-26-0P, 2-Chloro-6-methyl-N-[2-(phenylacetyl)-2,3-dihydro-1H-isoindol-5-yl]nicotinamide 689159-39-5P, 2-Chloro-N-[4-[[6-(2,5-dimethyl-1H-pyrrol-1-yl)-2-pyridinyl]acetyl]amino]phenyl]-6-methylnicotinamide 689159-61-3P, 2-[3-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethanol 689159-67-9P, 3-(2,5-Dimethyl-1H-pyrrol-1-yl)-1-[2-(4-nitrophenoxy)ethyl]-1H-pyrazole 689159-75-9P, 4-[2-[3-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethoxy]aniline 689160-02-9P, N-(4-Aminophenyl)-2-(1H-pyrazol-1-yl)acetamide 689160-25-6P, 5-Nitro-1-(1H-pyrazol-1-ylacetyl)indoline 689161-24-8P, tert-Butyl 5-[(2-isopropoxy-4-methylbenzoyl)amino]-1-indolinecarboxylate 689161-31-7P, N-(2,3-Dihydro-1H-indol-5-yl)-2-isopropoxy-4-methylbenzamide 689162-11-6P, 4-Acetyl-2-(dimethylamino)benzoic acid 689162-61-6P, 2-(Dimethylamino)-4,5-dimethoxybenzoic acid 689162-71-8P, Methyl 1-methyl-1,2,3,4-tetrahydro-8-quinolinecarboxylate 689162-75-2P,

1-Methyl-1,2,3,4-tetrahydro-8-quinolinecarboxylic acid 689162-86-5P,
Methyl 1-ethyl-1,2,3,4-tetrahydro-8-quinolinecarboxylate 689162-91-2P,
1-Ethyl-1,2,3,4-tetrahydro-8-quinolinecarboxylic acid 689163-04-0P,
Methyl 5-chloro-1-methyl-1,2,3,4-tetrahydro-8-quinolinecarboxylate
689163-06-2P, 5-Chloro-1-methyl-1,2,3,4-tetrahydro-8-quinolinecarboxylic
acid 689163-24-4P 689163-34-6P 689163-41-5P, 2-[Ethyl(methyl)amino]-
6-methylnicotinic acid 689163-46-0P 689163-51-7P,
2-(Diethylamino)-6-methylnicotinic acid 689163-55-1P 689163-60-8P
689163-65-3P, 2-(Isopropylamino)-6-methylnicotinic acid 689163-71-1P,
Benzyl 2-(cyclohexylamino)-6-methylnicotinate 689163-76-6P,
2-(Cyclohexylamino)-6-methylnicotinic acid 689165-95-5P, tert-Butyl
6-[[2-chloro-6-methyl-3-pyridinyl]carbonyl]amino]-3,4-dihydro-2(1H)-
isoquinolinecarboxylate 689166-00-5P, tert-Butyl 6-[[6-methyl-2-(4-
methyl-1-piperidinyl)-3-pyridinyl]carbonyl]amino]-3,4-dihydro-2(1H)-
isoquinolinecarboxylate 689166-06-1P, 6-Methyl-2-(4-methyl-1-
piperidinyl)-N-(1,2,3,4-tetrahydro-6-isoquinolinyl)nicotinamide
689166-28-7P, tert-Butyl 6-[[2-(dimethylamino)-6-methyl-3-
pyridinyl]carbonyl]amino]-3,4-dihydro-2(1H)-isoquinolinecarboxylate
689166-33-4P, 2-(Dimethylamino)-6-methyl-N-(1,2,3,4-tetrahydro-6-
isoquinolinyl)nicotinamide 689166-50-5P, tert-Butyl
6-[(2-isopropoxy-4-methylbenzoyl)amino]-3,4-dihydro-2(1H)-
isoquinolinecarboxylate 689166-59-4P, 2-Isopropoxy-4-methyl-N-(1,2,3,4-
tetrahydro-6-isoquinolinyl)benzamide 689166-78-7P, tert-Butyl
6-[(2-(dimethylamino)benzoyl)amino]-3,4-dihydro-2(1H)-
isoquinolinecarboxylate 689166-85-6P, 2-(Dimethylamino)-N-(1,2,3,4-
tetrahydro-6-isoquinolinyl)benzamide 689167-36-0P, N-[2-(1H-Pyrazol-1-
yl)ethyl]-1,4-benzenediamine 689169-68-4P, 1-[2-(4-Nitrophenoxy)ethyl]-
1H-pyrrole 689169-73-1P, 4-[2-(1H-Pyrrol-1-yl)ethoxy]aniline
689169-89-9P, N-[1-(Chloroacetyl)-2,3-dihydro-1H-indol-5-yl]-4'-
(trifluoromethyl)-1,1'-biphenyl-2-carboxamide 689170-32-9P, Ethyl
2-methyl-4-[(trifluoromethyl)sulfonyl]oxy]-5-pyrimidinecarboxylate
689170-37-4P, Ethyl 2-methyl-4-(4-methyl-1-piperidinyl)-5-
pyrimidinecarboxylate 689170-45-4P, 2-Methyl-4-(4-methyl-1-piperidinyl)-
5-pyrimidinecarboxylic acid 689170-65-8P, Ethyl 4-(4-methyl-1-
piperidinyl)-2-(trifluoromethyl)-5-pyrimidinecarboxylate 689170-69-2P,
4-(4-Methyl-1-piperidinyl)-2-(trifluoromethyl)-5-pyrimidinecarboxylic
acid 689170-84-1P, Ethyl 4-(4-methyl-1-piperidinyl)-2-(methylthio)-5-
pyrimidinecarboxylate 689170-89-6P, 4-(4-Methyl-1-piperidinyl)-2-
(methylthio)-5-pyrimidinecarboxylic acid 689171-16-2P,
2-[5-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-pyrazol-1-yl]ethanol
689171-23-1P, 5-(2,5-Dimethyl-1H-pyrrol-1-yl)-1-[2-(4-nitrophenoxy)ethyl]-
1H-pyrazole 689171-29-7P, 4-[2-[5-(2,5-Dimethyl-1H-pyrrol-1-yl)-1H-
pyrazol-1-yl]ethoxy]aniline 689171-93-5P, 5-Nitro-1-(1H-1,2,4-triazol-1-
ylacetyl)indoline 689172-22-3P, 5-Nitro-1-(1H-tetrazol-1-
ylacetyl)indoline 689172-28-9P, 1-(1H-Tetrazol-1-ylacetyl)-5-
indolinamine 689173-27-1P, N-(1-Chloroacetyl-2,3-dihydro-1H-indol-5-yl)-
6-methyl-2-(4-methyl-1-piperidinyl)nicotinamide 689173-48-6P,
N-[1-(Chloroacetyl)-2,3-dihydro-1H-indol-5-yl]-2-isopropoxy-4-
methylbenzamide 689173-61-3P, tert-Butyl 5-[[6-methyl-2-(4-
thiomorpholinyl)-3-pyridinyl]carbonyl]amino]-1-indolinecarboxylate
689173-69-1P, N-(2,3-Dihydro-1H-indol-5-yl)-6-methyl-2-(4-
thiomorpholinyl)nicotinamide 689173-82-8P, 2-Chloro-6-methyl-N-[1-[2-(2-
pyridinyl)ethyl]-2,3-dihydro-1H-indol-5-yl]nicotinamide 689173-95-3P,
tert-Butyl 5-[[2-isopropoxy-6-methyl-3-pyridinyl]carbonyl]amino]-1-
indolinecarboxylate 689174-01-4P, N-(2,3-Dihydro-1H-indol-5-yl)-2-
isopropoxy-6-methylnicotinamide 689174-12-7P, tert-Butyl
4-[4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-

pyridinyl]carbonyl]amino]phenyl]-1-piperazinecarboxylate 689174-19-4P,
 6-Methyl-2-(4-methyl-1-piperidinyl)-N-[4-(1-piperazinyl)phenyl]nicotinamide
 de 689174-45-6P, tert-Butyl 4-[4-[(2-isopropoxy-4-
 methylbenzoyl)amino]phenyl]-1-piperazinecarboxylate 689174-51-4P,
 2-Isopropoxy-4-methyl-N-[4-(1-piperazinyl)phenyl]benzamide
 689174-69-4P, 2-Chloro-6-methyl-N-[3-oxo-2-[2-(2-pyridinyl)ethyl]-2,3-
 dihydro-1H-isoindol-5-yl]nicotinamide 689174-84-3P,
 2-(Dimethylamino)-3-(trifluoromethyl)benzonitrile 689174-92-3P,
 2-(Dimethylamino)-3-(trifluoromethyl)benzoic acid 689176-16-7P,
 3-(Dimethylamino)-4-methyl-2-thiophenecarboxylic acid 689177-02-4P,
 Ethyl 4-[[4-methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]benzoate
 689177-10-4P, 4-[[4-Methyl-2-(4-methyl-1-piperidinyl)benzoyl]amino]benzoi
 c acid 689177-53-5P, Ethyl 4-[[2-(dimethylamino)-4-
 methylbenzoyl]amino]benzoate 689177-60-4P, 4-[[2-(Dimethylamino)-4-
 methylbenzoyl]amino]benzoic acid 689177-81-9P, 4-Nitro-N-[1-(2-
 pyridinyl)ethyl]benzamide 689177-89-7P, 4-Amino-N-[1-(2-
 pyridinyl)ethyl]benzamide 689178-24-3P, 1-[2-(4-Nitrophenoxy)ethyl]-N-
 trityl-1H-pyrazol-5-amine 689178-30-1P, 1-[2-(4-Aminophenoxy)ethyl]-N-
 trityl-1H-pyrazol-5-amine 689179-09-7P, 1-[2-[(5-Nitro-2-
 pyridinyl)oxy]ethyl]-N-trityl-1H-pyrazol-5-amine 689179-16-6P,
 6-[2-[5-(Tritylamino)-1H-pyrazol-1-yl]ethoxy]-3-pyridinamine
 689180-25-4P, 5-Nitro-N-[2-[3-(tritylamino)-1H-pyrazol-1-yl]ethyl]-2-
 pyridinamine 689180-33-4P, 5-Amino-2-[[2-[3-(tritylamino)-1H-pyrazol-1-
 yl]ethyl]aminolpyridine 689180-58-3P, 2-[5-(Tritylamino)-1H-pyrazol-1-
 yl]ethyl 4-methylbenzenesulfonate 689180-64-1P, 1-(2-Azidoethyl)-N-
 trityl-1H-pyrazol-5-amine 689180-70-9P, N-[1-(2-Aminoethyl)-1H-pyrazol-
 5-yl]-N-tritylamine 689180-76-5P, 1-[2-[(4-Nitrophenyl)amino]ethyl]-N-
 trityl-1H-pyrazol-5-amine 689180-82-3P, tert-Butyl N-(4-nitrophenyl)[2-
 [5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate 689180-88-9P,
 tert-Butyl N-(4-aminophenyl)[2-[5-(tritylamino)-1H-pyrazol-1-
 yl]ethyl]carbamate 689181-60-0P, 5-Nitro-N-[2-[5-(tritylamino)-1H-
 pyrazol-1-yl]ethyl]-2-pyridinamine 689181-66-6P, tert-Butyl
 N-(5-nitro-2-pyridinyl)[2-[5-(tritylamino)-1H-pyrazol-1-
 yl]ethyl]carbamate 689181-73-5P, tert-Butyl N-(5-amino-2-pyridinyl)[2-
 [5-(tritylamino)-1H-pyrazol-1-yl]ethyl]carbamate
 (intermediate; preparation of amides as apolipoprotein B secretion
 inhibitors)

IT 75-33-2, 2-Propanethiol 76-83-5, Trityl chloride 94-09-7, Ethyl
 4-aminobenzoate 100-01-6, 4-Nitroaniline, reactions 103-74-2,
 2-(2-Hydroxyethyl)pyridine 105-07-7, 4-Formylbenzonitrile 109-01-3,
 1-Methylpiperazine 110-13-4, 2,5-Hexanedione 110-89-4, Piperidine,
 reactions 110-91-8, Morpholine, reactions 111-49-9 122-04-3,
 4-Nitrobenzoyl chloride 123-75-1, Pyrrolidine, reactions 123-90-0,
 Thiomorpholine 288-13-1, Pyrazole 288-32-4, Imidazole, reactions
 350-46-9, 4-Fluoronitrobenzene 504-29-0, 2-Aminopyridine 579-75-9,
 2-Methoxybenzoic acid 610-14-0, 2-Nitrobenzoyl chloride 610-16-2,
 2-(Dimethylamino)benzoic acid 626-58-4, 4-Methylpiperidine 637-59-2,
 (3-Bromopropyl)benzene 683-60-3, Sodium isopropoxide 704-45-0,
 2-Methoxy-4-methylbenzoic acid 1003-29-8, Pyrrole-2-carboxaldehyde
 1089-06-1, 2-(Phenylacetyl)-5-isoindolinamine 1824-81-3,
 6-Methyl-2-pyridinamine 2305-36-4, 2-Amino-4-methylbenzoic acid
 2706-56-1, 2-(2-Pyridinyl)ethylamine 2942-59-8, 2-Chloronicotinic acid
 3383-72-0, 1-(2-Chloroethoxy)-4-nitrobenzene 4045-30-1,
 4,4-Dimethylpiperidine 4548-45-2, 2-Chloro-5-nitropyridine 5653-40-7,
 2-Amino-4,5-dimethoxybenzoic acid 5900-58-3, Methyl
 4-chloro-2-aminobenzoate 6314-23-4, 2-(1H-Pyrazol-1-yl)ethanol
6322-56-1, 4-Acetyl-2-nitrophenol 16034-48-3,

1H-Pyrazol-1-ylacetic acid 16179-97-8, 2-Pyridylacetic acid
 dihydrochloride 21732-17-2, 1H-Tetrazol-1-ylacetic acid 30529-70-5,
 2-Chloro-6-methylnicotinic acid 32692-19-6, 5-Nitroindoline
 37460-75-6, 2-Isopropyl-4-methylbenzoic acid 39853-81-1,
 2-Chloro-6-methylnicotinoyl chloride 41253-21-8, 1,2,4-Triazole sodium
 salt 42088-91-5, [1-(2-Pyridinyl)ethyl]amine 42093-97-0,
 2-(1-Piperidinyl)benzoic acid 53135-24-3, Ethyl 2-methyl-6-oxo-1,6-
 dihydro-5-pyrimidinecarboxylate 57381-51-8, 4-Chloro-2-
 fluorobenzonitrile 58498-12-7, 4-(2-Pyridinylmethyl)aniline
 63635-26-7, 2-Isopropoxybenzoic acid 73616-27-0, 2-(5-Amino-1H-pyrazol-
 1-yl)ethanol 75890-68-5, [2-(Formylamino)-1,3-thiazol-4-yl]acetic acid
 78648-27-8, 2-(1-Pyrrolidinyl)benzoic acid 84392-17-6,
 4'-(Trifluoromethyl)[1,1'-biphenyl]-2-carboxylic acid 84392-24-5,
 4'-Ethyl-1,1'-biphenyl-2-carboxylic acid 85006-31-1, Methyl
 3-amino-4-methyl-2-thiophenecarboxylate 88709-18-6,
 2-Ethoxy-4-methylbenzoic acid 94610-82-9, 2-Fluoro-4-
 methoxybenzonitrile 118449-67-5, 2-(4-Methylphenyl)-1-cyclohexene-1-
 carboxylic acid 129487-92-9, tert-Butyl 5-amino-1-indolinecarboxylate
 146070-34-0, 2-Fluoro-4-(trifluoromethyl)benzonitrile 146070-35-1,
 2-Fluoro-3-(trifluoromethyl)benzonitrile 157921-38-5,
 4'-(Dimethylamino)-1,1'-biphenyl-2-carboxylic acid 163009-16-3,
 (1-Trityl-1H-1,2,4-triazol-3-yl)methyl methanesulfonate 164148-92-9,
 tert-Butyl 6-amino-3,4-dihydro-2(1H)-isoquinolinecarboxylate
 180340-74-3, 4'-(Trifluoromethyl)-1,1'-biphenyl-2-carbonyl chloride
 186390-79-4, tert-Butyl 6-nitro-3,4-dihydro-2(1H)-isoquinolinecarboxylate
 191104-16-2, Methyl 4-methyl-2-[(trifluoromethanesulfonyl)oxy]benzoate
 212892-02-9, Methyl 4-chloro-2-[(trifluoromethyl)sulfonyl]oxy]benzoate
 273727-27-8, 3-[[4-(4-Aminophenyl)-1-piperazinyl]methyl]benzonitrile
 343355-98-6, 2-(4-Methyl-1-piperidinyl)benzoic acid 344561-49-5,
 4-[2-(2-Pyridinyl)ethoxy]phenylamine 361550-33-6, N-[2-(2-
 Pyridinyl)ethyl]-2,5-pyridinediamine 381706-53-2, 3-[[4-(5-Amino-2-
 pyridinyl)-1-piperazinyl]methyl]benzonitrile 400727-71-1,
 2-(1H-Pyrazol-1-ylacetyl)-5-isindolinamine 408365-24-2,
 1-(4-Aminophenyl)-3-(2-pyridinyl)propan-1-one 408365-84-4, tert-Butyl
 N-(4-aminophenyl)[2-[2-[(tert-butoxycarbonyl)amino]-1,3-thiazol-4-
 yl]ethyl]carbamate 408365-92-4, tert-Butyl N-(4-aminophenyl)[2-[6-
 [(tert-butoxycarbonyl)amino]-2-pyridinyl]ethyl]carbamate 408367-22-6,
 [6-[(tert-Butoxycarbonyl)amino]-2-pyridinyl]acetic acid 408369-33-5,
 N-(4-Aminophenyl)-N-[2-(2-pyridinyl)ethyl]formamide 474519-72-7,
 1-[2-(2-Pyridinyl)ethyl]-5-indolinamine 474519-88-5,
 N-(2,3-Dihydro-1H-indol-5-yl)-4'-(trifluoromethyl)-1,1'-biphenyl-2-
 carboxamide 474520-50-8, 1-Acetyl-2,3-dihydro-1H-indol-5-ylamine
 537713-11-4, 2-(4-Aminophenyl)-N-(2-pyridinyl)acetamide 537713-66-9,
 N-(4-Aminophenyl)-2-(2-pyridinyl)acetamide 537714-00-4, tert-Butyl
 [6-[2-(4-aminophenyl)amino]ethyl]-2-pyridinyl carbamate 537714-05-9,
 tert-Butyl [6-[2-(4-aminophenoxy)ethyl]-2-pyridinyl] carbamate
 537714-52-6, tert-Butyl [4-[2-(4-aminophenoxy)ethyl]-1,3-thiazol-2-
 yl]carbamate 537715-07-4, N-[2-(6-Amino-3,4-dihydroisoquinolin-2(1H)-
 yl)ethyl]acetamide 537715-50-7, N-(4-Aminophenyl)-2-[6-(2,5-dimethyl-1H-
 pyrrol-1-yl)-2-pyridinyl]acetamide 537717-32-1, 6-Amino-2-[2-(2-
 pyridinyl)ethyl]-1-isindolinone 689139-77-3, 2-(3,6-Dihydro-1(2H)-
 pyridinyl)benzoic acid 689140-29-2, Benzyl 4-methyl-2-
 [(trifluoromethanesulfonyl)oxy]benzoate 689142-35-6, Benzyl
 5-methyl-2-[(trifluoromethanesulfonyl)oxy]benzoate 689145-43-5,
 tert-Butyl N-[4-[[6-methyl-2-(4-methyl-1-piperidinyl)-3-
 pyridinyl]carbonyl]amino]phenyl][2-(2-pyridinyl)ethyl]carbamate
 689146-66-5, N-[4-[2-(2-Pyridinyl)ethoxy]phenyl]nicotinamide

689149-70-0, Benzyl 4-methoxy-2-[(trifluoromethyl)sulfonyl]oxy]benzoate
 689150-60-5 689153-19-3, N-(2-Chloroethyl)-4-nitroaniline hydrochloride
 689159-05-5, 2-(2-Pyridinylacetyl)-5-isoindolinamine 689160-28-9,
 1-(1H-Pyrazol-1-ylacetyl)-5-indolinamine 689161-17-9,
 2-Isopropoxy-4-methylbenzoic acid 689161-75-9, 4-Chloro-2-
 isopropoxybenzoic acid 689172-01-8, 1-(1H-1,2,4-Triazol-1-ylacetyl)-5-
 indolinamine 689179-98-4, N-[2-[3-(Tritylamoно)-1H-pyrazol-1-yl]ethyl]-
 1,4-benzenediamine 689180-18-5, 1-(2-Aminoethyl)-N-trityl-1H-pyrazol-3-
 amine

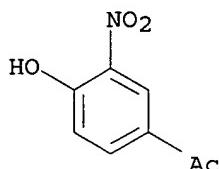
(preparation of amides as apolipoprotein B secretion inhibitors)

IT **6322-56-1**, 4-Acetyl-2-nitrophenol

(preparation of amides as apolipoprotein B secretion inhibitors)

RN 6322-56-1 USPATFULL

CN Ethanone, 1-(4-hydroxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)



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YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE,
 BIOSIS, JAPIO, DRUGB, DISSABS' - CONTINUE? (Y)/N:y

L130 ANSWER 36 OF 101 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-449179 [42] WPIX
 DOC. NO. CPI: C2003-119201 [42]
 TITLE: Inhibiting protein tyrosine phosphatase activity
 comprises administering an organosulfur compound, useful
 for treating e.g. diabetes, autoimmune diseases
 DERWENT CLASS: B05
 INVENTOR: BRADY T P; ELABDELLAOUI H; FUNG L; LOWETH C; RAMNARAYAN
 K; RIDEOUT D; TSAI C; WANG J; WU F; YALAMOORI V V
 (BRAD-I) BRADY T P; (CENG-N) CENGENT THERAPEUTICS INC;
 (ELAB-I) ELABDELLAOUI H; (FUNG-I) FUNG L; (LOWE-I) LOWETH
 C; (RAMN-I) RAMNARAYAN K; (RIDE-I) RIDEOUT D; (STRU-N)
 STRUCTURAL BIOINFORMATICS INC; (TSAI-I) TSAI C; (WANG-I)
 WANG J; (WUFF-I) WU F; (YALA-I) YALAMOORI V V
 COUNTRY COUNT: 28

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 2003032916	A2 20030424 (200342)*	EN	163 [0]		A61K000-00
EP 1446110	A2 20040818 (200454)	EN			A61K031-185
AU 2002347912	A1 20030428 (200461)	EN			
US 20050065118	A1 20050324 (200526)	EN			A61K031-66
JP 2005509616	W 20050414 (200527)	JA	137		A61K031-155

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003032916 A2		WO 2002-US33076	20021016
AU 2002347912 A1		AU 2002-347912	20021016
EP 1446110 A2		EP 2002-784123	20021016
EP 1446110 A2		WO 2002-US33076	20021016
US 20050065118 A1		WO 2002-US33076	20021016
JP 2005509616 W		WO 2002-US33076	20021016
JP 2005509616 W		JP 2003-535722	20021016
US 20050065118 A1		US 2004-493113	20040415

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1446110 A2	Based on	WO 2003032916 A
AU 2002347912 A1	Based on	WO 2003032916 A
JP 2005509616 W	Based on	WO 2003032916 A

PRIORITY APPLN. INFO: US 2001-329957P 20011016

INT. PATENT CLASSIF.:

MAIN: A61K000-00; A61K031-155; A61K031-185; A61K031-66
 SECONDARY: A01N037-12; A01N037-44; A61K031-325; A61K031-426;
 A61K031-429; A61K031-433; A61K031-454; A61K031-5513;
 A61K031-675; A61P001-14; A61P013-12; A61P025-28;
 A61P027-02; A61P003-04; A61P003-10; A61P035-00;
 A61P043-00; A61P009-00; A61P009-10; A61P009-12

BASIC ABSTRACT:

WO 2003032916 A2 UPAB: 20060119

NOVELTY - Inhibiting protein tyrosine phosphatase activity comprises administering an organosulfur compound (I) is new.

DETAILED DESCRIPTION - Inhibiting protein tyrosine phosphatase activity comprises administering an organosulfur compound of formula (I) or its salts:

R1-R3 = H; OH; alkoxy; alkylthio; NO₂ or amino or amido, each optionally substituted with Q; 1-10C alkyl optionally substituted with Q1; phenyl optionally substituted with 1 or 2 Q2 (at positions 3 and 4); heteroaryl, cycloheteroalkyl or cycloheteroalkyl, each optionally substituted with Q3; or 3-10C cycloalkyl, 1-10C alkenyl, 1-10C alkadienyl, 4-10C cycloalkenyl, 5-12C bicycloalkyl or 8-14C tricycloalkyl, each optionally substituted with Q4;

Q, Q1 = e.g. alkyl, NH₂, cycloheteroalkyl, cycloalkyl, F;

Q2 = e.g. alkyl, CF₃, mono or dihalo, alkylthio;

Q3 = e.g. alkyl, halo, alkylthio, alkoxy, NO₂, OR';

Q4 = e.g. alkyl, F, aryl, heteroaryl, cycloheteroalkyl;

R' = e.g. H; 1-10C alkyl optionally substituted.

where each of R1-R3 is linked to their respective core atoms through C, N, O or S of the substituent group, provided that if R2 is to be linked through O or S, then the core atom S is oxidized.

Full Definitions are given in the Definitions Field (Full Definitions).

INDEPENDENT CLAIMS are included for compositions comprising (I).

ACTIVITY - Antidiabetic; Immunosuppressive;
 Antiinflammatory; Antiarthritic; Cytostatic.

MECHANISM OF ACTION - Tyrosine phosphatase inhibitors.

In tests to determine inhibition of tyrosine phosphatases, 5-(3(3(1H-1,2,3,4-tetraazol-5-yl)phenoxy)phenyl)(1,3,4-thiadiazol-2-yl))(3,4-dichlorophenyl)amine had IC₅₀ values 5 micro M for PTP-1B; 12 micro M for TC-PTP; 24 micro M for PTP-beta; and 10 micro M for CD-45.

USE - For inhibiting protein tyrosine phosphatase activity (claimed), and treating e.g. diabetes, autoimmune diseases, inflammation, transplantation rejection, arthritis, systemic lupus, Crohn's disease, inflammatory bowel disease, also other autoimmune disorders and cancer.

MANUAL CODE: CPI: B06-H; B07-H; B10-A12A; B10-A12B; B10-A13A; B10-A20; B14-C03; B14-C09; B14-D07A; B14-E10C; B14-G02C; B14-G02D; B14-H01B; **B14-S04**

TECH

PHARMACEUTICALS - Preferred Compounds: Typical compounds (I) include (3-3-(5-((3,4-dichlorophenyl)amino)-1,3,4-thiadiazol-2-yl)phenoxy)benzoic acid; and 4-(((1E)-1-aza-2-(3-(3-(5-(3,4-dichlorophenyl)amino)(1,3,4-thiadiazol-2-yl)phenoxy)phenyl)vinyl)amino)benzoic acid.

ABEX DEFINITIONS - Full Definitions: - R1-R3 = H; OH; alkoxy; alkylthio; NO₂ or amino or amido, each optionally substituted with Q; 1-10C alkyl optionally substituted with Q1; phenyl optionally substituted with 1 or 2 Q2 (at positions 3 and 4); heteroaryl, cycloheteroalkyl or cycloalkyl, each optionally substituted with Q3; or 3-10C cycloalkyl, 1-10C alkenyl, 1-10C alkadienyl, 4-10C cycloalkenyl, 5-12C bicycloalkyl or 8-14C tricycloalkyl, each optionally substituted with Q4; - Q = alkyl, NH₂, cycloheteroalkyl, cycloalkyl, F, aryl, heteroaryl, cycloheteroalkyl, alkylthio, arylthio, CN, OR', OC=ORa, C=O-ORb or C=O-NRcRc; - Q1 = alkyl, NH₂, cycloheteroalkyl, cycloalkyl, F, aryl, heteroaryl, cycloheteroalkyl, alkylthio, P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa, CH(COORa)₂, arylthio, CN, ORa, OC=ORa, C=O-ORb or C=O-NRbRb; - Q2 = alkyl, CF₃, mono or dihalo, alkylthio, alkoxy, NO₂, CN, morpholino, cyclohexyl, phenyl, phenolic, dioxyethylene, NO₂, acetylarnino, OR', P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa or CH(COORa)₂; - Q3 = alkyl, halo, alkylthio, alkoxy, NO₂, OR', P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa, or CH(COORa)₂; - Q4 = alkyl, F, aryl, heteroaryl, cycloheteroalkyl, cycloheteroalkyl alkylthio, arylthio, CN, P=O(ORa)₂, CH₂P=O(ORa)₂, NHCOCOORa, CH(COORa)₂, OR', OC=OR', C=O-ORA or C=O-NRcRc; - R' = H; 1-10C alkyl optionally substituted with Q5; or aryl, heteroaryl, cycloheteroalkyl or cycloheteroalkyl, each optionally substituted with Q6; or cycloalkyl optionally substituted with Q7; - Ra = H; 1-10C alkyl optionally substituted with Q8; aryl, each optionally substituted with Q9; or heteroaryl or cycloheteroalkyl optionally substituted with Q6; or cycloalkyl optionally substituted with Q11; - Q5 = alkyl, keto, F, alkoxy, alkylthio, aryl, heteroaryl, cycloheteroalkyl, cycloheteroalkyl, CN, aryloxy, cycloalkyl, COORa, P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa or CH(COORa)₂; - Q6 = alkyl, keto, F, alkoxy, alkylthio, CN, aryloxy, COORa, P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa or CH(COORa)₂; - Q7 = alkyl, keto, F, alkoxy, alkylthio, aryl, heteroaryl, cycloheteroalkyl, cycloheteroalkyl, CN, COORa, P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa or CH(COORa)₂; - Q8 = alkyl, keto, F, alkoxy, alkylthio, aryl, heteroaryl or cycloheteroalkyl; - Q9 = alkyl, keto, F, alkoxy or alkylthio; - Q11 = Q8, CN, COORa, P=O(ORa)₂, CH₂P=O(ORa)₂, CF₂P=O(ORa)₂, NHCOCOORa or CH(COORa)₂; - Ra = H; alkyl optionally substituted with Q8; or aryl, heteroaryl or cycloheteroalkyl, each optionally substituted with Q9; or cycloalkyl optionally substituted with Q8; - Rb = 1-10C alkyl optionally substituted with Q12; aryl optionally substituted with Q9; heteroaryl or cycloheteroalkyl, each

optionally substituted with Q13; or cycloalkyl optionally substituted with Q12; - Q12 = Q8, COOR_a, P=O(OR_a)₂, CH₂P=O(OR_a)₂, CF₂P=O(OR_a)₂, NHCOOCOR_a or CH(COOR_a)₂; - Q13 = Q9, COOR_a, P=O(OR_a)₂, CH₂P=O(OR_a)₂, CF₂P=O(OR_a)₂, NHCOOCOR_a or CH(COOR_a)₂; and - R_c = 1-10C alkyl optionally substituted with Q12; aryl optionally substituted with Q13; heteroaryl or cycloheteroalkyl, each optionally substituted with Q13; or cycloalkyl optionally substituted with Q12.

ADMINISTRATION - Dosage is 0.1-100 mg/kg. Administration is by gavage, subcutaneous, intravenous or intraperitoneal injections.

L130 ANSWER 37 OF 101 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-111180 [12] WPIX
 DOC. NO. CPI: C2004-045342 [12]
 TITLE: Use of salvianolic acid component as lipase inhibitor in the manufacture of composition for the treatment of overweight, hyperlipidemia and hypercholesterolemia
 DERWENT CLASS: B05; D13
 INVENTOR: DE BONT H B A; RAGGERS R J
 PATENT ASSIGNEE: (NUTR-N) NUTRICIA NV
 COUNTRY COUNT: 26

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
EP 1371368	A1	20031217	(200412)*	EN	16 [0]	A61K031-216

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1371368 A1		<u>EP 2002-77271</u>	<u>20020611</u>

PRIORITY APPLN. INFO: EP 2002-77271 20020611

INT. PATENT CLASSIF.:

MAIN: A61K031-216

SECONDARY: A61K031-192; A61K031-343; A61K035-78; A61P003-04

BASIC ABSTRACT:

EP 1371368 A1 UPAB: 20050528

NOVELTY - In the manufacture of a composition for the treatment of overweight and related disorders, salvianolic acid component, its salt or prodrug is used.

DETAILED DESCRIPTION - In the manufacture of a composition for the treatment of overweight and related disorders, salvianolic acid component of formula (I), its salt or prodrug is used.

R1 = optionally substituted 1-50C (hetero)hydrocarbyl.

INDEPENDENT CLAIMS are also included for:

(1) a composition for treating overweight comprising (I) (25 mg-10 g) and either chitosan and/or plant fiber (50 mg-50 g) for reducing fatty stool or the RDA of at least one fat soluble vitamin (10-250 %); and
 (2) a food product containing triglycerides (10-95 weight%) and (0.01-100 mg) of salvianolic acid component/gram of triglycerides.

ACTIVITY - Anorectic; Gastrointestinal-Gen.; Antilipemic.

MECHANISM OF ACTION - Lipase inhibitor.

Salvianolic acid was tested for lipase inhibitory activity by measuring the rate of hydrolysis of para-nitrophenyl caprylate to

para-nitrophenol and caprylate. A substrate solution was prepared by mixing buffer B (500 ml) (phosphate buffer containing Triton x-100 (RTM) (0.1 weight/volume%)) and stock solution of para-nitrophenol caprylate in acetonitrile (5.3 ml). Lipase solution was prepared by solubilizing porcine pancreas lipase (3 mg/ml) in a phosphate buffer (200 mM pH 7). Samples were prepared by adding commercial extracts of Salvia extracts (Salvia miltiorrhiza) (40 mg) to dimethylsulfoxide (4 ml), incubating at room temperature for 15 minutes, followed by centrifugation to remove the insoluble. The sample (25 micro l) (test) or dimethylsulfoxide (25 micro l) (control) was added to the substrate solution (150 micro l) and incubated for 10 minutes at 37 degreesC. Lipase solution (25 micro l) was added and para-nitrophenol formation was determined during 10 minutes. The test extract containing greater than 60 weight% of salvianolic acid component showed 50 % of lipase inhibition as compared to 0 % of inhibition in the control.

USE - In the manufacture of composition for the treatment or prevention of overweight and related disorders, intestinal absorption; for reducing gastrointestinal lipase activity; for reducing adipose tissue mass; as lipase inhibitor (claimed); for treating obesity related disorders e.g. hyperlipidemia and hypercholesterolemia. In the industrial process e.g. manufacture of protein hydrolyzate.

ADVANTAGE - The salvianolic acid inhibits the action of pancreatic lipase and thus inhibits the intestinal absorption of dietary fats from ingested food or feed. The enteral administration salvianolic acid results in decreased absorption of high caloric ingredients from the diet. The composition containing (I) and plant fibers efficiently reduce overweight without side effects such as fatty stool or reduced absorption of fat-soluble vitamins.

MANUAL CODE: CPI: B06-H; B07-H; B10-C03; B14-D02A2; B14-D07A;
B14-E12; B14-F06; D03-H01T2

TECH

ORGANIC CHEMISTRY - Preferred Components: The salvianolic acid component comprises at least two (preferably at least three) dihydroxyphenyl moieties.

PHARMACEUTICALS - Preferred Components: The fat-soluble vitamins are administered with the composition. A plant isolate containing (I) (at least 5, preferably at least 10) wt.% based on the dry weight is used in the composition.

BIOLOGY - Preferred Components: The salvianolic acid is plant derived. The plant isolate is obtained from plant belonging to Salvia (preferably Salvia miltiorrhiza).

ABEX DEFINITIONS - Preferred Definitions: - R1 = (COR2); - R2 = Q or CH=CH-R3; - Q = (cyclo)alkyl, alkenyl, alkynyl, heterocyclyl or (hetero)aryl (all optionally substituted); - R3 = Q or phenol (substituted by R4 and R5 on 2 and 3 positions respectively); - R4 = OH; and - R5 = Q; or - R4+R5 = optionally substituted tetrahydrofuran in which R4 is -O-.

ADMINISTRATION - The salvianolic acid component is administered enterally at a dosage of 0.1-250 (preferably 0.5-100) mg/kg/day (claimed); and orally at a dosage of 0.2-4 (preferably 0.5-3) g.

SPECIFIC COMPOUNDS - Use of 4 compounds (I) is specifically claimed e.g. 3-(2-(2-(3,4-dihydroxy-phenyl)-vinyl)-3,4-dihydroxy-phenyl)-acrylic acid 1-carboxy-2-(3,4-dihydroxy-phenyl)-ethyl ester (Ia).

EXAMPLE - No relevant example given.

TITLE: Composition for dyeing keratin-containing fibers, especially human hair, comprises a carbonyl compound and a 4-aminopyrazolin-5-one derivative

DERWENT CLASS: B07; D21; E19; E24

INVENTOR: MOELLER H; MOLLER H; OBERKOBUSCH D

PATENT ASSIGNEE: (HENK-C) HENKEL KGAA

COUNTRY COUNT: 34

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
DE 10148847	A1	20030410	(200339)*	DE	19[0]	A61K007-13
WO 2003030845	A1	20030417	(200339)	DE		A61K007-075
EP 1434557	A1	20040707	(200444)	DE		A61K007-075
AU 2002338777	A1	20030422	(200460)	EN		A61K007-075
EP 1434557	B1	20051109	(200574)	DE		A61K007-075
DE 50204900	G	20051215	(200582)	DE		A61K007-075

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 10148847 A1		DE 2001-10148847	20011004
AU 2002338777 A1		AU 2002-338777	20020925
DE 50204900 G		DE 2002-50204900	20020925
EP 1434557 A1		EP 2002-777201	20020925
EP 1434557 B1		EP 2002-777201	20020925
DE 50204900 G		EP 2002-777201	20020925
WO 2003030845 A1		WO 2002-EP10730	20020925
EP 1434557 A1		WO 2002-EP10730	20020925
EP 1434557 B1		WO 2002-EP10730	20020925
DE 50204900 G		WO 2002-EP10730	20020925

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 50204900 G	Based on	EP 1434557 A
EP 1434557 A1	Based on	WO 2003030845 A
AU 2002338777 A1	Based on	WO 2003030845 A
EP 1434557 B1	Based on	WO 2003030845 A
DE 50204900 G	Based on	WO 2003030845 A

PRIORITY APPLN. INFO: DE 2001-10148847 20011004

INT. PATENT CLASSIF.:

MAIN: A61K007-075; A61K007-13

BASIC ABSTRACT:

DE 10148847 A1 UPAB: 20060202

NOVELTY - Composition for dyeing keratin-containing fibers, especially human hair, comprises:

(1) at least one aldehyde or ketone (A), and/or their salts; and

(2) a 4-aminopyrazolin-5-one derivative (B).

DETAILED DESCRIPTION - Composition for dyeing keratin-containing fibers, especially human hair, comprises:

(i) at least one aldehyde or ketone (A) of formula (I) and/or

their salts; and

(ii) a 4-aminopyrazolin-5-one derivative (B) of formulae (IIa) or (IIb).

AR = benzene, naphthalene, pyridine, pyrimidine, pyrazine, pyridazine, carbazole, pyrrole, pyrazole, furan, thiophene, 1,2,3- or 1,3,5-triazine, (iso)quinoline, indole, indoline, indolizine, indane, imidazole, 1,2,4- or 1,2,3-triazole, tetrazole, benzimidazole, thiazole, benzothiazole, indazole, benzoxazole, quinoxaline, quinazoline, quinolizine, cinnoline, acridine, julolidine, acenaphthene, fluorene, biphenyl, diphenylmethane, benzophenone, diphenyl ether, azobenzene, chromone, coumarin, diphenylamine, stilbene, where N-heterocycles may be quaternized;

R1 = hydrogen, 1-4C (perfluoro)alkyl, 1-5C acyl, 2-4C alkenyl, or optionally substituted (hetero)aryl;

R2-R4 = hydrogen, halo, 1-4C (hydroxy or amino)alkyl, alkoxy or acyl, carboxy, carboxylato, sulfo, sulfato, 2-6C alkenyl, aryl, aryl(1-4C)alkyl, hydroxy, nitro, pyrrolidino, morpholino, piperidino, amino, ammonio or imidazol-1-yl (the last three optionally substituted by 1-4C (carboxy or hydroxy)alkyl, 1-4C hydroxyalkoxy, 2-4C alkenyl, optionally substituted benzyl, sulfo(1-4C)alkyl or heterocyclo(1-4C)alkyl), also two of the residues -XCOR1, R2-R4 together may form an optionally substituted 5-7 membered ring, optionally fused to an aromatic ring, and AR, depending on the size of the ring, may include additional substituents as defined for R2-R4;

X = direct bond, carbonyl, carboxy(1-4C)alkylene, optionally substituted 2-6C alkenylene, 4-6C alkadienylene, (vinylene)furylene, (vinylene)thienylene, (vinylene)arylene, or together with COR1 it forms an optionally substituted 5-7 membered ring;

R5-R7 = hydrogen, halo, 1-4C alkyl, alkoxy or hydroxyalkoxy, hydroxy, carboxy, carboxylato, 1-4C alkoxycarbonyl, optionally substituted carbamoyl, sulfo, sulfato, sulfamoyl or amino, optionally substituted by 1-4C (hydroxy)alkyl;

R8, R9 = hydrogen, hydroxy, amino, 1-4C alkyl or alkoxy, carbamoyl, carboxy, 1-4C alkoxycarbonyl, aryl, aryl(1-4C)alkyl or heteroaryl.

USE - The compositions are used to dye human hair in bright, deep shades in a wide range of colors.

ADVANTAGE - The composition provides a dyeing at least equivalent, as regards color depth, grey covering and fastness, to conventional dyeing, without the absolute requirement for an oxidizing agent.

Compositions without an oxidizing agent have little or no potential for sensitizing the skin.

MANUAL CODE:

CPI: B05-A03A; B05-B02A3; B05-B02C; B05-C05; B05-C07;
B06-H; B07-H; B08-D03; B10-A09A; B10-A09B; B10-A22;
B10-B01A; B10-B02E; B10-B04A; B10-C02; B10-C03; B10-C04B;
B10-D01; B10-E04B; B10-F02; B12-M05; B14-R02; D08-B06;
E06-H; E07-D08; E07-H; E10-D01; E10-F02; E26-C

TECH

ORGANIC CHEMISTRY - Preferred Composition: Each of (A) and (B) is present at 0.03-65, preferably 1-40, mmole per 100 g of treatment composition.

The composition may also include one or more of (C) a primary or secondary aromatic amine, N-containing heterocycle, aromatic hydroxy compound, amino acid, oligopeptide, acidic methylene compound and/or quaternary ammonium compound; a color intensifier; a direct dye (at 0.01-20%); ammonium or metal salt; oxidizing agent (particularly 0.01-6 wt.% hydrogen peroxide); anionic, zwitterionic or nonionic surfactant; also a wide range of

essentially conventionally additives, including the antidandruff agents piroctone olamine or zinc omadine.

The composition has pH 2-11, particularly 5-10.

Preferred Materials: Typical (C) are 2-chloro-p-phenylenediamine or 3,4-diaminobenzoic acid.

The direct dyes are selected from nitrophenylenediamine, nitroaminophenol, anthraquinone or indophenol types.

A typical color intensifier is piperidine or pyrazole.

ABEX SPECIFIC COMPOUNDS - 283 Compounds are specifically claimed as (A), e.g. acetophenone, salicylaldehyde, and 4-formyl-1-methylpyridinium benzenesulfonate. - 24 Compounds are specifically claimed as (B), e.g. 4-aminoantipyrine, 4-amino-3-methyl-1-phenyl-2-pyrazolin-5-one and 4-amino-1-phenyl-2-pyrazolin-5-one.

EXAMPLE - 4-Formyl-1-methylpyridinium benzenesulfonate (5 mmole), 4-aminoantipyrine (5 mmole), sodium acetate (5 mmole) and piperidine (5 mmole), plus one drop of 20% fatty alkyl ether sulfate solution were slurried in water (50 ml) at 50 degrees C, then cooled to 30 degrees C and adjusted to pH 9 with sodium hydroxide or hydrochloric acid. When the mixture was used to dye 90% grey, untreated hair, for 30 minutes at 30 degrees C, an intense to very intense orange-red shade was produced.

L130 ANSWER 39 OF 101 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-196703 [19] WPIX
 DOC. NO. CPI: C2003-050624 [19]
 DOC. NO. NON-CPI: N2003-156018 [19]
 TITLE: Ink composition for acoustic ink jet printer comprises ink vehicle, ink viscosity component, conductive compound, antioxidant, lightfastness component, and colorant
 DERWENT CLASS: E24; G02; T04
 INVENTOR: BRETON M P; MALHOTRA S L; WONG R W
 PATENT ASSIGNEE: (XERO-C) XEROX CORP
 COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
US 6461417	B1	20021008	(200319)*	EN	13[0]	C09D011-02	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6461417	B1	US 2000-645712	20000824

PRIORITY APPLN. INFO: US 2000-645712 20000824

INT. PATENT CLASSIF.:

MAIN: C09D011-02

BASIC ABSTRACT:

US 6461417 B1 UPAB: 20060118

NOVELTY - An ink composition comprises an ink vehicle of alkyl alkyl ketones, alkyl aryl ketones or aryl aryl ketones; an ink viscosity component; a conductive compound; an antioxidant compound; a lightfastness compound and a colorant.

DETAILED DESCRIPTION - An ink composition comprises

(a) an ink vehicle of (i) 1-25C alkyl alkyl ketones of formula

$\text{CH}_3(\text{CH}_2)_m\text{CO}(\text{CH}_2)_n\text{CH}_3$ ($m, n = \text{integers}$), (ii) 1-20C alkyl aryl ketones where the aryl is anthracene, naphthalene or phenyl or (iii) aryl aryl ketones where each aryl is benzyl, phenyl or naphthyl;

- (b) an ink viscosity component;
- (c) a conductive compound;
- (d) an antioxidant compound;
- (e) a lightfastness compound; and
- (f) a colorant.

USE - Ink for acoustic ink jet printer (claimed).

ADVANTAGE - The ink provides developed images with crease values of 5-13, haze values of 10-15, gloss values of 80-85 and conductivity values of 6.5-7.5 log (pico-mho/cm). It possesses an acoustic-loss value of 10-80 dB/mm and a viscosity of 5-10 cP at 125-165 degrees C.

MANUAL CODE:

CPI: E05-G02; E06-A01; E06-D06; E07-A02C; E07-A04;
E07-D03; E07-D04C; E07-E01; E07-E03; E10-A09B1;
E10-A09B7; E10-A09B8; E10-A10C; E10-A11B2; E10-A22G;
E10-B03A1; E10-B03B2; E10-B04A2; E10-B04E2; E10-E02D2;
E10-E02F1; E10-E04J; E10-F02; E21-C10; E21-C11; E21-C15;
E21-C16; G02-A04A; G05-F03

EPI: T04-G02C

TECH

ORGANIC CHEMISTRY - Preferred Composition: The ink composition comprises 2-97 wt.% ink vehicle; 0.5-45 wt.% viscosity component; 0.5-30 wt.% conductive compound; 0.5-5 wt.% antioxidant compound; 0.5-5 wt.% lightfastness component; and 1-13 wt.% colorant.

Preferred Properties: The ink vehicle has a melting point of 60-135 degrees C. The viscosity component may be a carbonate compound having a melting point of 60-135 degrees C. It may also be a ketone having a melting point of 75-125 degrees C.

Preferred Compounds: The ink vehicle is n-octyl-n-propyl ketone, n-octyl-n-butyl ketone, n-decyl-n-ethyl ketone, n-undecyl-n-propyl ketone, n-dodecyl-n-ethyl ketone, di-n-hexyl ketone, di-n-heptyl ketone, di-n-octyl ketone, di-n-nonyl ketone, di-n-decyl ketone, di-n-undecyl ketone, di-n-tridecyl ketone, di-n-heptadecyl ketone, di-n-octadecyl ketone, benzylphenyl ketone, di-n-benzyl ketone, diphenyl acetone, distyryl ketone, n-octylphenyl ketone, n-undecylphenyl ketone, n-pentadecylphenyl ketone or 2-naphthyl phenyl ketone.

The viscosity component may be a carbonate or a ketone (mono- or di-ketone). The carbonate compound is preferably diphenyl carbonate, benzyl 4-nitrophenyl carbonate, tert.-butyl 4-formyl phenyl carbonate, tert.-butyl 4-formyl-2-methoxyphenyl carbonate or 1,2-diphenylvinylene carbonate. The ketone is 4,4-diphenyl-2-cyclohexen-1-one; 3-(dimethylamino)-5,5-dimethyl-2-cyclohexen-1-one; 3-(2-hydroxyethylamino)-5,5-dimethyl-2-cyclohexen-1-one; 4,5-diphenyl-1,3-dioxol-2-one; 2-oxazolidone; 4-ethoxymethylene-2-phenyl-2-oxazolin-5-one; 5-methoxy-1-tetralone; 6-methoxy-1-tetralone; 5-(hydroxymethyl)-2-pyrrolidone; flavone; 4-methoxy chalcone; 4'-methoxy chalcone; 4-(dimethylamino) chalcone; trans, trans-dibenzylidene acetone; or gamma-(2-naphthyl)-gamma-butyrolactone. The mono ketone is preferably 1-(4(1-pyrrolidinyl)-2-butynyl)-2-pyrrolidinone sesquifumarate, 6,7-dimethoxy-2,2-dimethyl-4-chromanone, 2,2-dimethyl-7-ethoxy-6-methoxy-4-chromanone, 5,6-dimethoxy-1-indanone, 3-amino-2-ethyl-4(3H)-quinazolinone, 2,6-diphenylcyclohexanone, or flavanone. The diketone is preferably 1-(2-hydroxyphenyl)-3-phenyl-1,3-propanedione, 1-(2-hydroxy-5-methylphenyl)-3-phenyl-1,3-propanedione, 1-(5-chloro-2-hydroxy-4-methylphenyl)-3-phenyl-1,3-propanedione, tetramethyl-1,3-cyclobutane dione, 4-hydroxy-5-methyl-4-cyclopentene-1,3-dione monohydrate, 2,5-oxazolidine

dione, 5,5-dimethyl oxazolidine-2,4-dione, 3,6-dimethyl-1,4-dioxane-2,5-dione, 2,2-dimethyl-1,3-dioxane-4,6-dione, 4,4-dimethyl-1,3-cyclohexane dione or 5-(dimethylamino methylene)-2,2-dimethyl-1,3-dioxane-4,6-dione. The conductive compound is methyl 1-adamantane sulfonate, octadecyl 4-chlorobenzene sulfonate, tetrabutylammonium trifluoromethane sulfonate, S,S'-ethylene-p-toluene thiosulfonate or pyridinium 3-nitrobenzene sulfonate.

The antioxidant is 2-amino-4-(ethylsulfonyl)phenol, 4-bromo-3,5-dimethylphenol, 3-(ethylamino)-p-cresol, tetrakis(2,4-di-tert.-butylphenyl)4,4'-biphenyl phosphonite) or pentaerythritol tetrakis(3,5-di-tert.-butyl-4-hydroxy hydrocinnamate).

The lightfastness component is an ultraviolet (UV) absorbing compound, preferably 4'-iodoacetophenone, 4'-hydroxy-3'-nitroacetophenone, 4'-hydroxy-3'-methyl acetophenone, 4'-hydroxy-2'-methyl acetophenone, 3'-5'-dimethoxy-4'-hydroxyacetophenone, 2'-4'-dihydroxy-3'-propyl acetophenone, 2-hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone, 2-benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone or 4-dodecyloxy-2-hydroxy benzophenone.

ABEX EXAMPLE - A black phase-change ink composition was prepared by mixing 40 wt.% di-n-octadecyl ketone (ink vehicle), 30 wt.% 1,3-diacetyl 2-imidazolidinone (viscosity modifier), 20 wt.% 1-adamantane sulfonate (conductive salt), 3 wt.% tetrakis(2,4-di-tert.-butylphenyl)-4,4'-biphenyl diphosphonite (antioxidant), 2 wt.% 4'-iodoacetophenone (UV absorber) and 5 wt.% black dye (CI 12195). The ink gave a hardness value of 80 at 23 degrees C with an acoustic loss value of 60 dB/mm, a viscosity of 6.5 cPs and a conductivity of 6.7 log (pico-mho/cm) at 150 degrees C.

L130 ANSWER 40 OF 101 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1998-250915 [22] WPIX
 DOC. NO. CPI: C1998-078154 [22]
 TITLE: Composition containing nitrogen mono:oxide synthase inhibitor and agent for trapping reactive oxygen - used in e.g. treatment of atherosclerosis, migraine, arterial hypertension, ischaemia and thrombosis
 DERWENT CLASS: B05
 INVENTOR: BIGG D; CHABRIER DE LASSAUNIERE P; CHABRIER DE LASSAUNIERE P E; DE LASSAUNIERE P C
 PATENT ASSIGNEE: (SCRC-C) SCRAS SOC CONSEILS RECH & APPL SCI; (SCRC-C) SCRAS SOC CONSEILS RECH APPL SCI; (SCRC-C) SOC CONSEILS RECH & APPL SCI
 COUNTRY COUNT: 77

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC	
WO 9809653	A1 19980312 (199822)*		FR	21[0]	A61K045-06	<--
FR 2753098	A1 19980313 (199823)		FR		A61K031-17	<--
AU 9742111	A 19980326 (199832)		EN		A61K045-06	<--
NO 9901100	A 19990505 (199928)		NO		A61K000-00	<--
EP 939654	A1 19990908 (199941)		FR		A61K045-06	<--
NZ 334597	A 20001027 (200062)		EN		A61K045-06	<--
JP 2000517336	W 20001226 (200104)	JA 22			A61K045-00	<--
AU 734296	B 20010607 (200137)		EN		A61K045-06	<--
US 6297281	B1 20011002 (200160)		EN		A01N047-34	<--
RU 2174844	C2 20011020 (200176)		RU		A61K045-06	<--
EP 939654	B1 20040421 (200428)		FR		A61K045-06	

DE 69728782	E 20040527 (200436)	DE	A61K045-06
ES 2221066	T3 20041216 (200506)	ES	A61K045-06
IL 128801	A 20050517 (200537)	EN	A61K031-155

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9809653 A1		WO 1997-FR1567	<u>19970905</u>
FR 2753098 A1		FR 1996-10875	<u>19960906</u>
AU 9742111 A		AU 1997-42111	<u>19970905</u>
AU 734296 B		AU 1997-42111	<u>19970905</u>
DE 69728782 E		DE 1997-69728782	<u>19970905</u>
EP 939654 A1		EP 1997-940183	<u>19970905</u>
EP 939654 B1		EP 1997-940183	<u>19970905</u>
DE 69728782 E		EP 1997-940183	<u>19970905</u>
ES 2221066 T3		EP 1997-940183	<u>19970905</u>
IL 128801 A		IL 1997-128801	<u>19970905</u>
NZ 334597 A		NZ 1997-334597	<u>19970905</u>
NO 9901100 A		WO 1997-FR1567	<u>19970905</u>
EP 939654 A1		WO 1997-FR1567	<u>19970905</u>
NZ 334597 A		WO 1997-FR1567	<u>19970905</u>
JP 2000517336 W		WO 1997-FR1567	<u>19970905</u>
US 6297281 B1		WO 1997-FR1567	<u>19970905</u>
RU 2174844 C2		WO 1997-FR1567	<u>19970905</u>
EP 939654 B1		WO 1997-FR1567	<u>19970905</u>
DE 69728782 E		WO 1997-FR1567	<u>19970905</u>
JP 2000517336 W		JP 1998-512314	<u>19970905</u>
RU 2174844 C2		RU 1999-106792	<u>19970905</u>
US 6297281 B1		US 1999-254254	<u>19990302</u>
NO 9901100 A		NO 1999-1100	<u>19990305</u>

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 734296 B	Previous Publ	AU 9742111 A
DE 69728782 E	Based on	EP 939654 A
ES 2221066 T3	Based on	EP 939654 A
AU 9742111 A	Based on	WO 9809653 A
EP 939654 A1	Based on	WO 9809653 A
NZ 334597 A	Based on	WO 9809653 A
JP 2000517336 W	Based on	WO 9809653 A
AU 734296 B	Based on	WO 9809653 A
US 6297281 B1	Based on	WO 9809653 A
RU 2174844 C2	Based on	WO 9809653 A
EP 939654 B1	Based on	WO 9809653 A
DE 69728782 E	Based on	WO 9809653 A
IL 128801 A	Based on	WO 9809653 A

PRIORITY APPLN. INFO: FR 1996-10875 19960906

INT. PATENT CLASSIF.:

MAIN: A01N047-34; A61K000-00; A61K031-155; A61K031-17;
A61K045-00; A61K045-06

SECONDARY: A01N033-00; A61K031-19; A61K031-192; A61K031-198;
A61K031-341; A61K031-355; A61K031-381; A61K031-40;
A61K031-403; A61K031-404; A61K031-41; A61K031-416;

A61K031-4164; A61K031-4184; A61K031-44; A61K031-4458;
A61K031-505; A61K031-535; A61K031-5377; A61K031-541;
A61K031-55; A61P025-00; A61P029-00; A61P031-04;
A61P031-12; A61P035-00; A61P037-00; A61P039-00;
A61P009-00; A61P009-10

ADDITIONAL: C07C279-00; C07C065-03; C07D233-28

BASIC ABSTRACT:

WO 1998009653 A1 UPAB: 20060114

Pharmaceutical composition containing at least one nitrogen monoxide (NO) synthase inhibitor (I), at least one substance (II) that traps reactive forms of oxygen and optionally a pharmaceutical carrier, is new. Also claimed is the use of a combined product containing at least one (I) and at least one (II) in separate form, in the treatment of diseases in which NO and the reactive forms of oxygen are implicated, e.g. cardiovascular and cerebrovascular disorders, central and peripheral nervous system disorders, proliferative and inflammatory diseases, autoimmune and viral diseases, diarrhoea, vomiting, radioactive irradiation, solar radiation, organ transplants, cancer and other disorders resulting from the production or dysfunctioning of nitrogen monoxide or reactive oxygen.

USE - The product is used in the treatment of e.g. atherosclerosis, migraine, arterial hypertension, ischaemia, thrombosis, septic shock, cardiac or cerebral infarct due to ischaemia or haemorrhage, cognitive disorders, encephalopathy, depression, anxiety, schizophrenia, epilepsy, sleep disorders and eating disorders, lupus, AIDS, viral or parasitic infections, diabetes, multiple sclerosis and myopathy, gastrointestinal, pulmonary and airway inflammation (all claimed).

MANUAL CODE: CPI: B06-D05; B07-H; B10-A17; B14-C01; B14-C09B;
B14-F02B; B14-G02D; B14-J01; B14-K01A; B14-N16

Member(0002)

ABEQ FR 2753098 A1 UPAB 20060114

Pharmaceutical composition containing at least one nitrogen monoxide (NO) synthase inhibitor (I), at least one substance (II) that traps reactive forms of oxygen and optionally a pharmaceutical carrier, is new. Also claimed is the use of a combined product containing at least one (I) and at least one (II) in separate form, in the treatment of diseases in which NO and the reactive forms of oxygen are implicated, e.g. cardiovascular and cerebrovascular disorders, central and peripheral nervous system disorders, proliferative and inflammatory diseases, autoimmune and viral diseases, diarrhoea, vomiting, radioactive irradiation, solar radiation, organ transplants, cancer and other disorders resulting from the production or dysfunctioning of nitrogen monoxide or reactive oxygen.

USE - The product is used in the treatment of e.g. atherosclerosis, migraine, arterial hypertension, ischaemia, thrombosis, septic shock, cardiac or cerebral infarct due to ischaemia or haemorrhage, cognitive disorders, encephalopathy, depression, anxiety, schizophrenia, epilepsy, sleep disorders and eating disorders, lupus, AIDS, viral or parasitic infections, diabetes, multiple sclerosis and myopathy, gastrointestinal, pulmonary and airway inflammation (all claimed).

Member(0005)

ABEQ EP 939654 A1 UPAB 20060114

Pharmaceutical composition containing at least one nitrogen monoxide (NO) synthase inhibitor (I), at least one substance (II) that traps reactive forms of oxygen and optionally a pharmaceutical carrier, is new. Also claimed is the use of a combined product containing at least one (I) and

at least one (II) in separate form, in the treatment of diseases in which NO and the reactive forms of oxygen are implicated, e.g. cardiovascular and cerebrovascular disorders, central and peripheral nervous system disorders, proliferative and inflammatory diseases, autoimmune and viral diseases, diarrhoea, vomiting, radioactive irradiation, solar radiation, organ transplants, cancer and other disorders resulting from the production or dysfunctioning of nitrogen monoxide or reactive oxygen.

USE - The product is used in the treatment of e.g. atherosclerosis, migraine, arterial hypertension, ischaemia, thrombosis, septic shock, cardiac or cerebral infarct due to ischaemia or haemorrhage, cognitive disorders, encephalopathy, depression, anxiety, schizophrenia, epilepsy, sleep disorders and eating disorders, lupus, AIDS, viral or parasitic infections, diabetes, multiple sclerosis and myopathy, gastrointestinal, pulmonary and airway inflammation (all claimed).

Member (0007)

ABEQ JP 2000517336 W UPAB 20060114

Pharmaceutical composition containing at least one nitrogen monoxide (NO) synthase inhibitor (I), at least one substance (II) that traps reactive forms of oxygen and optionally a pharmaceutical carrier, is new. Also claimed is the use of a combined product containing at least one (I) and at least one (II) in separate form, in the treatment of diseases in which NO and the reactive forms of oxygen are implicated, e.g. cardiovascular and cerebrovascular disorders, central and peripheral nervous system disorders, proliferative and inflammatory diseases, autoimmune and viral diseases, diarrhoea, vomiting, radioactive irradiation, solar radiation, organ transplants, cancer and other disorders resulting from the production or dysfunctioning of nitrogen monoxide or reactive oxygen.

USE - The product is used in the treatment of e.g. atherosclerosis, migraine, arterial hypertension, ischaemia, thrombosis, septic shock, cardiac or cerebral infarct due to ischaemia or haemorrhage, cognitive disorders, encephalopathy, depression, anxiety, schizophrenia, epilepsy, sleep disorders and eating disorders, lupus, AIDS, viral or parasitic infections, diabetes, multiple sclerosis and myopathy, gastrointestinal, pulmonary and airway inflammation (all claimed).

=> d ibib ed ab ind 41-101

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' - CONTINUE? (Y)/N:y

L130 ANSWER 41 OF 101 MEDLINE on STN

DUPLICATE 9

ACCESSION NUMBER: 1998129894 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9468642

TITLE:

Antidiabetic principles of natural medicines. II.

Aldose reductase and alpha-glucosidase inhibitors from Brazilian natural medicine, the leaves of Myrcia multiflora DC. (Myrtaceae): structures of myrciacitrins I and II and myrciaphenones A and B.

AUTHOR: Yoshikawa M; Shimada H; Nishida N; Li Y; Toguchida I; Yamahara J; Matsuda H

CORPORATE SOURCE: Kyoto Pharmaceutical University, Japan.

SOURCE: Chemical & pharmaceutical bulletin, (1998 Jan)

Vol. 46, No. 1, pp. 113-9.

Journal code: 0377775. ISSN: 0009-2363.

PUB. COUNTRY: Japan
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199805
 ENTRY DATE: Entered STN: 20 May 1998
 Last Updated on STN: 20 May 1998
 Entered Medline: 13 May 1998

ED Entered STN: 20 May 1998
 Last Updated on STN: 20 May 1998
 Entered Medline: 13 May 1998

AB The methanolic extract and ethyl acetate-soluble portion from a Brazilian natural medicine, the leaves of *Myrcia multiflora* DC., which has been used as a specific medicine against **diabetes**, were found to show inhibitory activities on aldose reductase and alpha-glucosidase and on the increase of serum glucose level in sucrose-loaded rats and in alloxan-induced **diabetic** mice. From the ethyl acetate-soluble portion, new flavanone glucosides, myrciacitrins I and II, and new acetophenone glucosides, myrciaphenones A and B, were isolated together with several known compounds such as five flavonol glycosides, myricitrin, mearnsitrin, quercitrin, desmanthin-1, and guaijaverin. The structures of new compounds were determined on the basis of physicochemical and chemical evidence. The principal components of this natural medicine including new glucosides, myrciacitrin I and myrciaphenone B, were found to show potent inhibitory activities on aldose reductase and alpha-glucosidase.

CT Check Tags: Male
 Acetophenones: IP, isolation & purification
 *Acetophenones: PD, pharmacology
 *Aldehyde Reductase: AI, antagonists & inhibitors
 Animals
 Blood Glucose: AN, analysis
 Brazil
 *Diabetes Mellitus, Experimental: DT, drug therapy
 Diabetes Mellitus, Experimental: EN, enzymology
 Flavonoids: IP, isolation & purification
 *Flavonoids: PD, pharmacology
 Glucosides: IP, isolation & purification
 *Glucosides: PD, pharmacology
 *Hypoglycemic Agents: PD, pharmacology
 *Medicine, Traditional
 Mice
 Microvilli: DE, drug effects
 Microvilli: EN, enzymology
 Plant Extracts: PD, pharmacology
 *Plants, Medicinal
 Rats
 Rats, Wistar
 Structure-Activity Relationship
 Sucrose
 *alpha-Glucosidases: AI, antagonists & inhibitors
 RN 57-50-1 (Sucrose)
 CN 0 (Acetophenones); 0 (Blood Glucose); 0 (Flavonoids); 0 (Glucosides); 0 (**Hypoglycemic** Agents); 0 (Plant Extracts); EC 1.1.1.21 (Aldehyde Reductase); EC 3.2.1.20 (alpha-Glucosidases)

DOCUMENT NUMBER: PubMed ID: 1453584
TITLE: Thromboxane in the pathogenesis of glomerular injury in diabetes.
AUTHOR: Craven P A; Melhem M F; DeRubertis F R
CORPORATE SOURCE: Department of Medicine, University of Pittsburgh, Pennsylvania.
SOURCE: Kidney international, (1992 Oct) Vol. 42, No. 4, pp. 937-46.
Journal code: 0323470. ISSN: 0085-2538.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 29 Jan 1993
Last Updated on STN: 29 Jan 1993
Entered Medline: 7 Jan 1993
ED Entered STN: 29 Jan 1993
Last Updated on STN: 29 Jan 1993
Entered Medline: 7 Jan 1993
AB The present study examined the role of thromboxane (TX) in the initiation and progression of glomerular injury in diabetic rats, as reflected by albuminuria and glomerular histology. Urinary thromboxane and albumin excretion (UTX and UAlb) were elevated by four months after induction of diabetes in the moderately hyperglycemic (200 to 400 mg/dl glucose) streptozotocin diabetic rat (SDR) compared to age-matched control rats. UTX and UAlb both increased progressively in SDR over the seven month period of study. Glomerular TX production, glomerular volume, fractional and absolute mesangial volume and glomerular basement membrane (GBM) width were also increased after seven months in SDR compared to control.
Treatment of SDR with a thromboxane synthetase inhibitor (TXI) 4' (imidazol-1-yl) acetophenone (100 mg/kg/day) for seven months beginning at the time of induction of diabetes prevented the increases in UTX, UAlb, glomerular TX production, glomerular volume and mesangial volume and attenuated, but did not prevent, GBM thickening. When the same dose of the TXI was begun five months after induction of diabetes and continued for two months, UTX and ex vivo glomerular TX production were reduced by only 60% compared to untreated SDR and remained higher than corresponding values in control rats. Delayed treatment with the TXI alone did not alter UAlb compared to untreated SDR. By contrast, treatment of five month albuminuric SDR for only two months with the TXI plus the TX receptor antagonist (TXRA) Bay U3405 (5 mg/kg/day) prevented a further increase in UAlb, and reduced fractional albumin clearance and mesangial volume compared to values in untreated SDR. Combined treatment with the TXI and TXRA had no effect on GBM width or glomerular volume compared to values in untreated SDR. The results support roles for TX in the initiation of, and for TX and/or endoperoxides in the progression of glomerular injury in SDR.
CT Check Tags: Female
 Albuminuria: ET, etiology
 Animals
 *Diabetes Mellitus, Experimental: PA, pathology
 Diabetic Nephropathies: ET, etiology
 *Kidney Glomerulus: PA, pathology
 Rats
 Rats, Sprague-Dawley
 Receptors, Thromboxane: DE, drug effects

Research Support, U.S. Gov't, Non-P.H.S.
 Thromboxanes: AI, antagonists & inhibitors

*Thromboxanes: PH, physiology

CN 0 (Receptors, Thromboxane); 0 (Thromboxanes)

L130 ANSWER 43 OF 101 MEDLINE on STN DUPLICATE 12
 ACCESSION NUMBER: 91011127 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 2212856
 TITLE: Suppression of urinary albumin excretion in diabetic rats by 4'-(imidazol-1-yl) acetophenone, a selective inhibitor of thromboxane synthesis.
 AUTHOR: Craven P A; DeRubertis F R
 CORPORATE SOURCE: Department of Medicine, University of Pittsburgh, PA.
 CONTRACT NUMBER: DK 34592 (NIDDK)
 SOURCE: The Journal of laboratory and clinical medicine, (1990 Oct) Vol. 116, No. 4, pp. 469-78.
 Journal code: 0375375. ISSN: 0022-2143.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 199011
 ENTRY DATE: Entered STN: 17 Jan 1991
 Last Updated on STN: 17 Jan 1991
 Entered Medline: 16 Nov 1990
 ED Entered STN: 17 Jan 1991
 Last Updated on STN: 17 Jan 1991
 Entered Medline: 16 Nov 1990
 AB Thromboxane contributes to the regulation of glomerular hemodynamics in experimental models of diabetes and has been implicated as mediator in some models of glomerular injury. In the present study we examined urinary albumin, protein, and thromboxane B2 (TXB2) excretion during the 170 days after induction of diabetes by injection of streptozotocin in insulin-treated moderately hyperglycemic (200 to 400 mg/dl glucose) rats (SDRs). The effects of a thromboxane synthesis inhibitor, 4'-(imidazol-1-yl)acetophenone (TXI) (100 mg/kg/day) on these parameters were also assessed. Urinary TXB2 and albumin excretion in SDRs was not different from that in normal rats between 7 and 90 days but were three times higher than normal in SDRs at 125 and 170 days after induction of diabetes. In SDRs, urinary protein excretion was higher than in controls at 170 days but not at earlier time points. Inulin clearance (CIn) of SDRs was significantly higher than control values at 7 and 90 days and was not influenced by TXI during this period. At 170 days CIn was not significantly different in SDRs and normal rats. By contrast, albumin clearance (CAIb) and fractional CAIb were elevated in SDRs when compared with those values in normal rats. Treatment of SDRs with TXI for 170 days completely prevented the rise in urinary TXB2, albumin, and protein excretion, as well as the rise in fractional CAIb, but did not alter prostaglandin E2 (PGE2) excretion. TXI also increased CIn in SDRs to levels that were significantly higher than normal at 170 days. TXI had no significant effect on urinary PGE2, TXB2, albumin, or protein excretion or on CIn in normal rats and did not influence blood pressure or blood glucose in normal rats or SDRs. The results suggest a role for thromboxane in the mediation of albuminuria in the SDR.
 CT Check Tags: Female
 *Albuminuria

Animals

Blood Glucose: ME, metabolism
 Diabetes Mellitus, Experimental: BL, blood
 Diabetes Mellitus, Experimental: PP, physiopathology
 *Diabetes Mellitus, Experimental: UR, urine
 Dinoprostone: UR, urine
 Glomerular Filtration Rate: DE, drug effects
 *Imidazoles: PD, pharmacology
 Proteinuria

Rats

Rats, Inbred Strains

Reference Values

Research Support, U.S. Gov't, P.H.S.

Serum Albumin: ME, metabolism

*Thromboxane B2: UR, urine

*Thromboxanes: AI, antagonists & inhibitors

RN 10041-06-2 (Ro 22-3581); 363-24-6 (Dinoprostone); 54397-85-2 (Thromboxane B2)

CN 0 (Blood Glucose); 0 (Imidazoles); 0 (Serum Albumin); 0 (Thromboxanes)

L130 ANSWER 44 OF 101 MEDLINE on STN

DUPLICATE 14

ACCESSION NUMBER: 87125638 MEDLINE

DOCUMENT NUMBER: PubMed ID: 3544930

TITLE: Ethanol oxidation and toxicity: role of alcohol P-450 oxygenase.

AUTHOR: Koop D R; Coon M J

CONTRACT NUMBER: AA-06221 (NIAAA)

AA-06756 (NIAAA)

SOURCE: Alcoholism, clinical and experimental research,
(1986) Vol. 10, No. 6 Suppl, pp. 44S-49S. Ref: 100
 Journal code: 7707242. ISSN: 0145-6008.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198703

ENTRY DATE: Entered STN: 3 Mar 1990

Last Updated on STN: 6 Feb 1998

Entered Medline: 20 Mar 1987

ED Entered STN: 3 Mar 1990

Last Updated on STN: 6 Feb 1998

Entered Medline: 20 Mar 1987

AB The isolation and characterization of ethanol-inducible rabbit liver microsomal cytochrome P-450, termed P-450 3a or P-450ALC, has provided definitive evidence for the role of this enzyme in alcohol oxidation. From findings on the distribution, substrate specificity, and mechanism of action of P-450ALC we have suggested "alcohol P-450 oxygenase" as a more biochemically accurate name than "microsomal ethanol-oxidizing system." The present review is concerned with studies in this and other laboratories on activities and inducers associated with this versatile enzyme. Numerous xenobiotics, including alcohols and ketones, nitrosamines, aromatic compounds, and halogenated alkanes, alkenes, and ethers, are known to undergo increased microsomal metabolism after chronic exposure of various species to ethanol. Diverse compounds and treatments may induce P-450ALC, including the administration of ten or more chemically different compounds, fasting, or the diabetic state.

Whether a common mechanism of induction is involved is unknown at this time. As direct evidence that P-450ALC catalyzes numerous metabolic reactions, the purified rabbit enzyme has been used in a reconstituted system to demonstrate various metabolic transformations, including the oxidation of various alcohols, acetone, acetol, p-nitrophenol, and aniline, the dealkylation of substituted nitrosamines, the reductive dechlorination of carbon tetrachloride, carbon tetrachloride-induced lipid peroxidation, and acetaminophen activation to form the glutathione conjugate.

CT Animals
Cricetinae
*Cytochrome P-450 Enzyme System: ME, metabolism

*Ethanol: ME, metabolism

Mice
Oxidation-Reduction

Peromyscus

Rabbits

Rats

Research Support, U.S. Gov't, P.H.S.

RN 64-17-5 (Ethanol); 9035-51-2 (Cytochrome P-450 Enzyme System)

L130 ANSWER 45 OF 101 MEDLINE on STN DUPLICATE 17
ACCESSION NUMBER: 76128128 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1250866
TITLE: Species-specific hypoglycemic activity of triphenylphosphoranylideneacetophenones.
AUTHOR: Ditullio N W; Blank B; Kostos V; Saunders H L; Leathem J H
SOURCE: Proceedings of the Society for Experimental Biology and Medicine. Society for Experimental Biology and Medicine (New York, N. Y.), (1976 Feb) Vol. 151, No. 2, pp. 249-52.
Journal code: 7505892. ISSN: 0037-9727.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197604
ENTRY DATE: Entered STN: 13 Mar 1990
Last Updated on STN: 13 Mar 1990
Entered Medline: 30 Apr 1976

ED Entered STN: 13 Mar 1990
Last Updated on STN: 13 Mar 1990
Entered Medline: 30 Apr 1976

AB The species-specific hypoglycemic activity of two 2-triphenylphosphoranylideneacetophenones is described. 2-Triphenylphosphoranylideneacetophenone (SK&F 45359) and 2-triphenylphosphoranylidene-m-trifluoromethyl-acetophenone (SK&F 62775) were hypoglycemic in various rat models, but failed to exhibit hypoglycemic activity in other species.

CT Check Tags: Female; Male
*Acetophenones: PD, pharmacology
Animals
*Diabetes Mellitus, Experimental: DT, drug therapy
Dogs
Guinea Pigs
*Hypoglycemia: CI, chemically induced
*Hypoglycemic Agents

Insulin: BL, blood

Liver Glycogen: BI, biosynthesis

Liver Glycogen: ME, metabolism

Organophosphorus Compounds: PD, pharmacology

Rabbits

Rats

Species Specificity

Structure-Activity Relationship

Terphenyl Compounds: PD, pharmacology

RN 11061-68-0 (Insulin)

CN 0 (Acetophenones); 0 (Hypoglycemic Agents); 0 (Liver Glycogen);
0 (Organophosphorus Compounds); 0 (Terphenyl Compounds)

L130 ANSWER 46 OF 101 MEDLINE on STN

DUPLICATE 18

ACCESSION NUMBER: 75148957 MEDLINE

DOCUMENT NUMBER: PubMed ID: 4459026

TITLE: A study on the physiological disposition of
acetophenetidin by the diabetic man.

AUTHOR: Dajani R M; Kayyali S; Saheb S E; Birbari A

SOURCE: Comparative and general pharmacology, (1974 Mar)
Vol. 5, No. 1, pp. 1-9.

Journal code: 7600504. ISSN: 0010-4035.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197507

ENTRY DATE: Entered STN: 10 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 28 Jul 1975

ED Entered STN: 10 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 28 Jul 1975

CT Check Tags: Female; Male

Administration, Oral

Adult

Diabetes Mellitus: DT, drug therapy

*Diabetes Mellitus: ME, metabolism

Humans

Insulin: PD, pharmacology

Insulin: TU, therapeutic use

Kinetics

Middle Aged

Phenacetin: AD, administration & dosage

*Phenacetin: ME, metabolism

Phenacetin: UR, urine

Phenols: ME, metabolism

RN 11061-68-0 (Insulin); 62-44-2 (Phenacetin)

CN 0 (Phenols)

L130 ANSWER 47 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2002477297 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12239100

TITLE: Rottlerin inhibits insulin-stimulated glucose transport in
3T3-L1 adipocytes by uncoupling mitochondrial oxidative
phosphorylation.

AUTHOR: Kayali Ayse G; Austin Darrell A; Webster Nicholas J G

CORPORATE SOURCE: Medical Research Service, San Diego Veterans Affairs Healthcare System, California 92161, USA.

SOURCE: Endocrinology, (2002 Oct) Vol. 143, No. 10, pp. 3884-96.

JOURNAL CODE: 0375040. ISSN: 0013-7227.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200210

ENTRY DATE: Entered STN: 20 Sep 2002
Last Updated on STN: 22 Oct 2002
Entered Medline: 21 Oct 2002

ED Entered STN: 20 Sep 2002
Last Updated on STN: 22 Oct 2002
Entered Medline: 21 Oct 2002

AB There is increasing evidence that protein kinase C (PKC) isoforms modulate insulin-signaling pathways in both positive and negative ways. Recent reports have indicated that the novel PKCdelta mediates some of insulin's actions in muscle and liver cells. Many studies use the specific inhibitor rottlerin to demonstrate the involvement of PKCdelta. In this study, we investigated whether PKCdelta might play a role in 3T3-L1 adipocytes. We found that PKCdelta is highly expressed in mouse adipose tissue and increased on 3T3-L1 adipocyte differentiation, and insulin-stimulated glucose transport is blocked by rottlerin. The phosphorylation state and activity of PKCdelta are not altered by insulin, but the protein translocates to membranes following insulin treatment. In contrast to the results with rottlerin, inhibition of PKCdelta activity or expression has no effect on glucose transport in adipocytes, unlike muscle cells. Lastly, we found that rottlerin lowers adenosine triphosphate levels in 3T3-L1 cells by acting as a mitochondrial uncoupler, and this is responsible for the observed inhibition of glucose transport.

CT 3T3 Cells
*Acetophenones: PD, pharmacology
 *Adipocytes: ME, metabolism
 Animals
 *Benzopyrans: PD, pharmacology
 Biological Transport: DE, drug effects
 Enzyme Activation: DE, drug effects
 *Enzyme Inhibitors: PD, pharmacology
 *Glucose: ME, metabolism
*Hypoglycemic Agents: PD, pharmacology
*Insulin: PD, pharmacology
 Isoenzymes: AI, antagonists & inhibitors
 Isoenzymes: ME, metabolism
 Mice
 *Mitochondria: ME, metabolism
 Oxidative Phosphorylation: DE, drug effects
 Protein Kinase C: AI, antagonists & inhibitors
 Protein Kinase C: ME, metabolism
 Protein Kinase C-delta
 Research Support, Non-U.S. Gov't
 Research Support, U.S. Gov't, Non-P.H.S.
 Tissue Distribution
*Uncoupling Agents: PD, pharmacology
 RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 82-08-6 (rottlerin)
 CN 0 (Acetophenones); 0 (Benzopyrans); 0 (Enzyme Inhibitors); 0 (

Hypoglycemic Agents; 0 (Isoenzymes); 0 (Uncoupling Agents); EC 2.7.1.- (Prkcd protein, mouse); EC 2.7.1.37 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-delta); EC 2.7.1.37 (protein kinase C lambda)

L130 ANSWER 48 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 2002490785 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 12351446
 TITLE: Alpha-tocopherol decreases superoxide anion release in human monocytes under hyperglycemic conditions via inhibition of protein kinase C-alpha.
 AUTHOR: Venugopal Senthil Kumar; Devaraj Sridevi; Yang Teddy; Jialal Ishwarlal
 CORPORATE SOURCE: Laboratory for Atherosclerosis and Metabolic Research, Department of Pathology, UC Davis Medical Center, Sacramento, California 95817, USA.
 CONTRACT NUMBER: K24 AT00596 (NCCAM)
 R01 AT00005 (NCCAM)
 SOURCE: Diabetes, (2002 Oct) Vol. 51, No. 10, pp. 3049-54.
 Journal code: 0372763. ISSN: 0012-1797.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 200212
 ENTRY DATE: Entered STN: 28 Sep 2002
 Last Updated on STN: 17 Dec 2002
 Entered Medline: 3 Dec 2002
 ED Entered STN: 28 Sep 2002
 Last Updated on STN: 17 Dec 2002
 Entered Medline: 3 Dec 2002
 AB Diabetes is a major risk factor for premature atherosclerosis, and oxidative stress appears to be an important mechanism. Previously, we showed that diabetic monocytes produce increased superoxide anion (O_2^-), and alpha-tocopherol (AT) supplementation decreases this. The aim of this study was to elucidate the mechanism(s) of O_2^- release and inhibition by AT under hyperglycemic (HG) conditions in monocytes. O_2^- release, protein kinase C (PKC) activity, and translocation of PKC-alpha and -betaII and p47phox were increased in THP-1 cells (human monocytic cell line) under HG (15 mmol/l glucose) conditions, whereas AT supplementation inhibited these changes. AT, NADPH oxidase inhibitors (apocynin and diphenyleneiodonium chloride [DPI]), and an inhibitor to PKC-alpha and other isoforms (2,2',3,3',4,4'-hexahydroxy-1,1'-biphenyl-6,6'-dimethanol dimethyl ether [HBDE]) but not PKC-beta II (LY379196) decreased O_2^- release and p47phox translocation. Antisense oligodeoxynucleotides to PKC-alpha and p47phox but not to PKC-betaII inhibited HG-induced O_2^- release and p47phox translocation in THP-1 cells. Under HG conditions, reactive oxygen species release from monocytes was not inhibited by agents affecting mitochondrial metabolism but was inhibited in human endothelial cells. We conclude that under HG conditions, monocytic O_2^- release is dependent on NADPH oxidase activity but not the mitochondrial respiratory chain; HG-induced O_2^- release is triggered by PKC-alpha, and AT inhibits O_2^- release via inhibition of PKC-alpha.
 CT Acetophenones: PD, pharmacology
 *Antioxidants: PD, pharmacology
 Biphenyl Compounds: PD, pharmacology

Cell Line

*Ellagic Acid: AA, analogs & derivatives

Ellagic Acid: PD, pharmacology

Enzyme Activation: DE, drug effects

Enzyme Inhibitors: PD, pharmacology

Humans

***Hyperglycemia: ME, metabolism**

Isoenzymes: AI, antagonists & inhibitors

Isoenzymes: GE, genetics

*Isoenzymes: ME, metabolism

Mesylates: PD, pharmacology

Monocytes: CY, cytology

*Monocytes: EN, enzymology

Oligodeoxyribonucleotides, Antisense: PD, pharmacology

Onium Compounds: PD, pharmacology

Phosphoproteins: AI, antagonists & inhibitors

Phosphoproteins: GE, genetics

Phosphoproteins: ME, metabolism

Protein Kinase C: AI, antagonists & inhibitors

Protein Kinase C: GE, genetics

*Protein Kinase C: ME, metabolism

Protein Kinase C-alpha

Pyrroles: PD, pharmacology

Research Support, U.S. Gov't, P.H.S.

*Superoxides: ME, metabolism

*alpha-Tocopherol: PD, pharmacology

RN 11062-77-4 (Superoxides); 154675-18-0 (2,2',3,3',4,4'-hexahydroxy-1,1'-biphenyl-6,6'-dimethanol dimethyl ether); 244-54-2 (diphenyleneiodonium); 476-66-4 (Ellagic Acid); 498-02-2 (acetovanillone); 59-02-9 (alpha-Tocopherol)

CN 0 (5,21 - 12,17-dimetheno-18H-dibenzo(i,o)pyrrolo(3,4-1)(1,8)diazacyclohexadecine-18,10(19H)dione,8-(dimethylamino)methyl)-6,7,8,9,10,11-hexahydro,monomethanesulfonate); 0 (Acetophenones); 0 (Antioxidants); 0 (Biphenyl Compounds); 0 (Enzyme Inhibitors); 0 (Isoenzymes); 0 (Mesylates); 0 (Oligodeoxyribonucleotides, Antisense); 0 (Onium Compounds); 0 (Phosphoproteins); 0 (Pyrroles); EC 1.6.3.1 (neutrophil cytosolic factor 1); EC 2.7.1.- (protein kinase C beta); EC 2.7.1.37 (PRKCA protein, human); EC 2.7.1.37 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-alpha)

L130 ANSWER 49 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2002460846 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12198656

TITLE: Insulin inhibits secretin-induced ductal secretion by activation of PKC alpha and inhibition of PKA activity.

AUTHOR: Lesage Gene D; Marucci Luca; Alvaro Domenico; Glaser Shannon S; Benedetti Antonio; Marzioni Marco; Patel Tushar; Francis Heather; Phinizy Jo Lynne; Alpini Gianfranco

CORPORATE SOURCE: Department of Internal Medicine, Scott & White Hospital and The Texas A&M University System HSC COM, Temple, TX, USA.

CONTRACT NUMBER: DK54208 (NIDDK)

DK58411 (NIDDK)

SOURCE: Hepatology (Baltimore, Md.), (2002 Sep) Vol. 36, No. 3, pp. 641-51.

Journal code: 8302946. ISSN: 0270-9139.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200209
 ENTRY DATE: Entered STN: 11 Sep 2002
 Last Updated on STN: 28 Sep 2002
 Entered Medline: 27 Sep 2002
 ED Entered STN: 11 Sep 2002
 Last Updated on STN: 28 Sep 2002
 Entered Medline: 27 Sep 2002
 AB Insulin stimulates canalicular bile flow by interaction with hepatocytes. Insulin regulates the function of a number of epithelia through activation and membrane translocation of Ca(2+)-dependent PKC isoforms. No information exists regarding insulin regulation of ductal bile secretion. The aim of the study was to determine the role and mechanisms of action of insulin in the regulation of cholangiocyte secretion in BDL rats. We determined the subcellular localization of insulin receptor in cholangiocytes. We measured the effect of insulin on (1) secretin-stimulated cAMP levels in cholangiocytes and duct expansion in intrahepatic bile duct units (IBDUs) in the absence or presence of BAPTA/AM, H7 or rottlerin and (2) bile flow. We evaluated (1) if insulin effects are associated with activation of PKC alpha and (2) if activation of PKC causes inhibition of secretin-stimulated cAMP levels and PKA activity. We found insulin receptors only in the apical domain of cholangiocytes. Insulin inhibited secretin-induced choleresis and secretin-stimulated cholangiocyte cAMP levels. Insulin inhibited secretin-induced secretion in IBDUs when applied at the basolateral membrane or microinjected into IBDU lumen. Insulin inhibitory effects on cholangiocyte secretion were blocked by BAPTA/AM and H7. Insulin induced activation of PKC alpha, which decreased secretin-stimulated cAMP and PKA activity. In conclusion, insulin inhibited secretin-induced ductal secretion of BDL rats through activation of PKC and inhibition of secretin-stimulated cAMP and PKA activity. In conclusion, insulin counter-regulates cholangiocyte secretory processes in the BDL model, which is characterized by cholangiocyte proliferation.
 CT Check Tags: Male
 1-(5-Isoquinolinesulfonyl)-2-Methylpiperazine: PD, pharmacology
 Acetophenones: PD, pharmacology
 Animals
 Benzopyrans: PD, pharmacology
 Bile: SE, secretion
 Bile Canaliculi: EN, enzymology
 Bile Canaliculi: SE, secretion
 Bile Ducts: CY, cytology
 Bile Ducts: EN, enzymology
 *Bile Ducts: SE, secretion
 Calcium: ME, metabolism
 Chelating Agents: PD, pharmacology
 Cyclic AMP: ME, metabolism
 *Cyclic AMP-Dependent Protein Kinases: AI, antagonists & inhibitors
 Cyclic AMP-Dependent Protein Kinases: ME, metabolism
 *Egtazic Acid: AA, analogs & derivatives
 Egtazic Acid: PD, pharmacology
 Enzyme Inhibitors: PD, pharmacology
 *Hypoglycemic Agents: PD, pharmacology
 *Insulin: PD, pharmacology
 Isoenzymes: AI, antagonists & inhibitors
 *Isoenzymes: ME, metabolism

Protein Kinase C: AI, antagonists & inhibitors

*Protein Kinase C: ME, metabolism

Protein Kinase C-alpha

Rats

Rats, Inbred F344

Receptor, Insulin: AN, analysis

Receptor, Insulin: BI, biosynthesis

Research Support, Non-U.S. Gov't

Research Support, U.S. Gov't, Non-P.H.S.

Research Support, U.S. Gov't, P.H.S.

Secretin: PD, pharmacology

RN 11061-68-0 (Insulin); 1393-25-5 (Secretin); 139890-68-9
 (1,2-bis(2-aminophenoxy)ethane N,N,N',N'-tetraacetic acid acetoxyethyl ester); 60-92-4 (Cyclic AMP); 67-42-5 (Egtazic Acid); 7440-70-2 (Calcium); 82-08-6 (rottlerin); 84477-87-2 (1-(5-Isoquinolinesulfonyl)-2-Methylpiperazine)

CN 0 (Acetophenones); 0 (Benzopyrans); 0 (Chelating Agents); 0 (Enzyme Inhibitors); 0 (Hypoglycemic Agents); 0 (Isoenzymes); EC 2.7.1.112 (Receptor, Insulin); EC 2.7.1.37 (Cyclic AMP-Dependent Protein Kinases); EC 2.7.1.37 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-alpha)

L130 ANSWER 50 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2002000535 MEDLINE

DOCUMENT NUMBER: PubMed ID: 11598137

TITLE: Peroxisome proliferator-activated receptor gamma ligands inhibit mitogenic induction of p21(Cip1) by modulating the protein kinase C δ pathway in vascular smooth muscle cells.

AUTHOR: Wakino S; Kintscher U; Liu Z; Kim S; Yin F; Ohba M; Kuroki T; Schonthal A H; Hsueh W A; Law R E

CORPORATE SOURCE: Division of Endocrinology, Diabetes, and Hypertension, School of Medicine, 142-8555 UCLA, 900 Veteran Ave., Los Angeles, CA 90095, USA.

CONTRACT NUMBER: HL 58328-03 (NHLBI)

SOURCE: The Journal of biological chemistry, (2001 Dec 14) Vol. 276, No. 50, pp. 47650-7. Electronic Publication: 2001-10-11.

Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200201

ENTRY DATE: Entered STN: 2 Jan 2002

Last Updated on STN: 18 Mar 2003

Entered Medline: 24 Jan 2002

ED Entered STN: 2 Jan 2002

Last Updated on STN: 18 Mar 2003

Entered Medline: 24 Jan 2002

AB The cyclin-dependent kinase inhibitor p21(Cip1) is up-regulated in response to mitogenic stimulation in various cells. PPARgamma ligands troglitazone (TRO, 10 microm) and rosiglitazone (RSG, 10 microm) attenuated the induction of p21(Cip1) protein by platelet-derived growth factor (PDGF) and insulin without affecting cognate mRNA levels in rat aortic smooth muscle cells (RASMC). The protein kinase C δ (PKC δ) inhibitor rottlerin also blocked the induction of p21(Cip1) protein,

whereas the conventional PKC isotype inhibitor Go 6976 had no effect. Kinetic studies using the protein synthesis inhibitor cycloheximide showed that TRO, RSG, and rottlerin shortened the half-life of p21(Cip1) protein. TRO, RSG, and rottlerin inhibited PDGF-induced expression of p21(Cip1), but they did not affect insulin-induced expression of p21(Cip1). Both ligands inhibited PKCdelta enzymatic activity in PDGF-stimulated RASMC but not in insulin-stimulated cells. Adenovirus-mediated overexpression of PKCdelta rescued the down-regulation of p21(Cip1) expression both by TRO and RSG in PDGF-treated RASMC. These data suggested that the PKCdelta pathway plays a critical role in PDGF-induced expression of p21(Cip1) in RASMC and may be the potential target for PPARgamma ligand effects. Src kinase-dependent tyrosine phosphorylation of PKCdelta was decreased substantially by TRO and RSG. Tyrosine phosphorylation and activation of c-Src in response to PDGF were unaffected by either PPARgamma ligand. Protein-tyrosine-phosphatase inhibitors sodium orthovanadate and dephostatin prevented PPARgamma ligand effects on PKCdelta tyrosine phosphorylation and enzymatic activity. Both inhibitors also reversed PPARgamma ligand effects on p21(Cip1) expression in PDGF-treated RASMC. PPARgamma ligands enhanced protein-tyrosine-phosphatase activity in RASMC, which may be the mechanism for decreased PKCdelta tyrosine phosphorylation and activity. PPARgamma ligands regulate p21(Cip1) at a post-translational level by blocking PKCdelta signaling and accelerating p21(Cip1) turnover.

CT

Acetophenones: PD, pharmacology

Adenoviridae: GE, genetics

Animals

Aorta, Thoracic: CY, cytology

Apoptosis

Benzopyrans: PD, pharmacology

Blotting, Western

Carbazoles: PD, pharmacology

Cell Division

Cells, Cultured

Chromans: PD, pharmacology

Cyclin-Dependent Kinase Inhibitor p21

*Cyclins: ME, metabolism

Cycloheximide: PD, pharmacology

Dose-Response Relationship, Drug

Down-Regulation

Enzyme Inhibitors: PD, pharmacology

Hydroquinones: PD, pharmacology

Indoles: PD, pharmacology

Insulin: ME, metabolism

*Isoenzymes: ME, metabolism

Kinetics

*Ligands

Mice

*Mitogens: PD, pharmacology

Models, Biological

Muscle, Smooth, Vascular: CY, cytology

*Muscle, Smooth, Vascular: EN, enzymology

Phosphorylation

Platelet-Derived Growth Factor: PD, pharmacology

Precipitin Tests

*Protein Kinase C: ME, metabolism

Protein Kinase C-delta

Protein Processing, Post-Translational

Protein Synthesis Inhibitors: PD, pharmacology
 Protein-Tyrosine-Phosphatase: AI, antagonists & inhibitors
 RNA: ME, metabolism

Rats

Rats, Sprague-Dawley

*Receptors, Cytoplasmic and Nuclear: ME, metabolism

Recombinant Proteins: ME, metabolism

Research Support, Non-U.S. Gov't

Research Support, U.S. Gov't, P.H.S.

Signal Transduction

Thiazoles: PD, pharmacology

*Thiazolidinediones

Time Factors

*Transcription Factors: ME, metabolism

Tyrosine: ME, metabolism

Up-Regulation

Vanadates: PD, pharmacology

RN 11061-68-0 (Insulin); 122320-73-4 (rosiglitazone); 136194-77-9 (Go 6976);
 151606-30-3 (dephostatin); 55520-40-6 (Tyrosine); 63231-63-0 (RNA);

CN 66-81-9 (Cycloheximide); 82-08-6 (rottlerin); 97322-87-7 (troglitazone)
 0 (Acetophenones); 0 (Benzopyrans); 0 (Carbazoles); 0 (Cdkn1a protein,
 mouse); 0 (Cdkn1a protein, rat); 0 (Chromans); 0 (Cyclin-Dependent Kinase
 Inhibitor p21); 0 (Cyclins); 0 (Enzyme Inhibitors); 0 (Hydroquinones); 0
 (Indoles); 0 (Isoenzymes); 0 (Ligands); 0 (Mitogens); 0 (Platelet-Derived
 Growth Factor); 0 (Protein Synthesis Inhibitors); 0 (Receptors,
 Cytoplasmic and Nuclear); 0 (Recombinant Proteins); 0 (Thiazoles); 0
 (Thiazolidinediones); 0 (Transcription Factors); 0 (Vanadates); EC 2.7.1.-
 (Prkcd protein, mouse); EC 2.7.1.- (Prkcd protein, rat); EC 2.7.1.37
 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-delta); EC 3.1.3.48
 (Protein-Tyrosine-Phosphatase)

L130 ANSWER 51 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2001264394 MEDLINE

DOCUMENT NUMBER: PubMed ID: 11356718

TITLE: Insulin-induced c-Jun N-terminal kinase activation is
 negatively regulated by protein kinase C delta.

AUTHOR: Morino K; Maegawa H; Fujita T; Takahara N; Egawa K;
 Kashiwagi A; Kikkawa R

CORPORATE SOURCE: Third Department of Medicine, Shiga University of Medical
 Science, Seta, Otsu, Shiga 520-2192, Japan.

SOURCE: Endocrinology, (2001 Jun) Vol. 142, No. 6, pp.
 2669-76.

PUB. COUNTRY: Journal code: 0375040. ISSN: 0013-7227.
 United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 25 Jun 2001
 Last Updated on STN: 25 Jun 2001
 Entered Medline: 21 Jun 2001

ED Entered STN: 25 Jun 2001

Last Updated on STN: 25 Jun 2001

Entered Medline: 21 Jun 2001

AB We investigated the role of protein kinase C (PKC) in insulin-induced
 c-Jun N-terminal kinase (JNK) activation in rat 1 fibroblasts expressing
 human insulin receptors. Insulin treatment led to increased SAPK/ERK

kinase 1 (SEK1) phosphorylation, and then stimulated JNK activity in a dose- and time-dependent manner, as measured either by a solid-phase kinase assay using glutathione S-transferase (GST)-c-Jun fusion protein as a substrate, or by quantitation of the levels of phosphorylated JNK by Western blotting using anti-phospho-JNK antibody. Insulin-induced JNK activation was potentiated by either preincubating cells with 2 nM GF109203X (PKC inhibitor) or down-regulation of PKC by overnight treatment with 100 nM tetradecanoyl phorbol acetate. In contrast, brief preincubation with 100 nM tetradecanoyl phorbol acetate inhibited the insulin- induced JNK activation. Furthermore, we found that 5 microM rottlerin, a PKCdelta inhibitor, enhanced insulin-induced JNK activation, but a PKCbeta inhibitor, LY333531, had no effect. Consistent with these findings, overexpression of PKCdelta led to decreased insulin-induced JNK activation, whereas overexpression of PKCbeta had no effect. Although overexpression of wild-type PKCdelta attenuated insulin-induced JNK activation, a kinase-dead PKCdelta mutant did not cause such attenuation. Finally, we found that the magnitude of insulin-induced JNK activation was inversely correlated with the expression level of PKCdelta among different cell lines. In conclusion, the expression of PKCdelta may negatively regulate insulin-induced JNK activation.

CT

Acetophenones: PD, pharmacology

Animals

Benzopyrans: PD, pharmacology

***Cell Cycle Proteins**

Cell Line

Enzyme Activation: DE, drug effects

Enzyme Inhibitors: PD, pharmacology

Fibroblasts: EN, enzymology

Gene Expression

Glutathione Transferase: GE, genetics

Glutathione Transferase: ME, metabolism

Humans

Immediate-Early Proteins: ME, metabolism

***Insulin: PD, pharmacology**

Isoenzymes: AI, antagonists & inhibitors

Isoenzymes: GE, genetics

Isoenzymes: PD, pharmacology**JNK Mitogen-Activated Protein Kinases*****MAP Kinase Kinase 4**

Mitogen-Activated Protein Kinase Kinases: GE, genetics

Mitogen-Activated Protein Kinase Kinases: ME, metabolism**Phosphoprotein Phosphatase**

Phosphorylation

Protein Kinase C: AI, antagonists & inhibitors

Protein Kinase C: GE, genetics

***Protein Kinase C: PD, pharmacology**

Protein-Tyrosine-Phosphatase: ME, metabolism

Proto-Oncogene Proteins c-jun: GE, genetics

Proto-Oncogene Proteins c-jun: ME, metabolism

Rats

Receptor, Insulin: GE, genetics

Recombinant Fusion Proteins: ME, metabolism

Research Support, Non-U.S. Gov't

Tetradecanoylphorbol Acetate: PD, pharmacology

RN 11061-68-0 (Insulin); 146888-90-6 (3CH134 protein); 16561-29-8
(Tetradecanoylphorbol Acetate); 82-08-6 (rottlerin)

CN 0 (Acetophenones); 0 (Benzopyrans); 0 (Cell Cycle Proteins); 0 (Enzyme

Inhibitors); 0 (Immediate-Early Proteins); 0 (Isoenzymes); 0 (Proto-Oncogene Proteins c-jun); 0 (Recombinant Fusion Proteins); EC 2.5.1.18 (Glutathione Transferase); EC 2.7.1.- (MAP Kinase Kinase 4); EC 2.7.1.- (MAP2K4 protein, human); EC 2.7.1.- (Mitogen-Activated Protein Kinase Kinases); EC 2.7.1.112 (Receptor, Insulin); EC 2.7.1.37 (JNK Mitogen-Activated Protein Kinases); EC 2.7.1.37 (Protein Kinase C); EC 3.1.3.16 (Phosphoprotein Phosphatase); EC 3.1.3.48 (Protein-Tyrosine-Phosphatase)

L130 ANSWER 52 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2001170068 MEDLINE

DOCUMENT NUMBER: PubMed ID: 11266508

TITLE: Insulin induces specific interaction between insulin receptor and protein kinase C delta in primary cultured skeletal muscle.

AUTHOR: Braiman L; Alt A; Kuroki T; Ohba M; Bak A; Tennenbaum T; Sampson S R

CORPORATE SOURCE: Faculty of Life Sciences, Gonda-Goldschmied Center Bar-Ilan University, Ramat-Gan 52900, Israel.

SOURCE: Molecular endocrinology (Baltimore, Md.), (2001 Apr) Vol. 15, No. 4, pp. 565-74.

Journal code: 8801431. ISSN: 0888-8809.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200109

ENTRY DATE: Entered STN: 24 Sep 2001

Last Updated on STN: 24 Sep 2001

Entered Medline: 20 Sep 2001

ED Entered STN: 24 Sep 2001

Last Updated on STN: 24 Sep 2001

Entered Medline: 20 Sep 2001

AB Certain protein kinase C (PKC) isoforms, in particular PKCs beta II, delta, and zeta, are activated by insulin stimulation. In primary cultures of skeletal muscle, PKCs beta II and zeta, but not PKC delta, are activated via a phosphatidylinositol 3-kinase (PI3K)-dependent pathway. The purpose of this study was to investigate the possibility that PKC delta may be activated upstream of PI3K by direct interaction with insulin receptor (IR). Experiments were done on primary cultures of newborn rat skeletal muscle, age 5-6 days in vitro. The time course of insulin-induced activation of PKC delta closely paralleled that of IR.

Insulin stimulation caused a selective coprecipitation of PKC delta with IR, and these IR immunoprecipitates from insulin-stimulated cells displayed a striking induction of PKC activity due specifically to PKC delta. To examine the involvement of PKC delta in the IR signaling cascade, we used recombinant adenovirus constructs of wild-type (W.T.) or dominant negative (D.N.) PKC delta. Overexpression of W.T. PKC delta induced PKC delta activity and coassociation of PKC delta and IR without addition of insulin. Overexpression of D.N. PKC delta abrogated insulin-induced coassociation of PKC delta and IR. Insulin-induced tyrosine phosphorylation of IR was greatly attenuated in cells overexpressing W.T. PKC delta, whereas in myotubes overexpressing D.N. PKC delta, tyrosine phosphorylation occurred without addition of insulin and was sustained longer than that in control myotubes. In control myotubes IR displayed a low level of serine phosphorylation, which was increased by insulin stimulation. In cells overexpressing W.T. PKC delta, serine

phosphorylation was strikingly high under basal conditions and did not increase after insulin stimulation. In contrast, in cells overexpressing D.N.PKC delta, the level of serine phosphorylation was lower than that in nonoverexpressing cells and did not change notably after addition of insulin. Overexpression of W.T.PKC delta caused IR to localize mainly in the internal membrane fractions, and blockade of PKC delta abrogated insulin-induced IR internalization. We conclude that PKC delta is involved in regulation of IR activity and routing, and this regulation may be important in subsequent steps in the IR signaling cascade.

CT Acetophenones: PD, pharmacology

Animals

Benzopyrans: PD, pharmacology

Cell Membrane: DE, drug effects

Cell Membrane: ME, metabolism

Cells, Cultured

Enzyme Inhibitors: PD, pharmacology

*Insulin: ME, metabolism

Insulin: PD, pharmacology

Insulin-Like Growth Factor I: PD, pharmacology

Isoenzymes: DE, drug effects

Isoenzymes: GE, genetics

*Isoenzymes: ME, metabolism

Muscle, Skeletal: CY, cytology

Muscle, Skeletal: DE, drug effects

*Muscle, Skeletal: ME, metabolism

Phosphorylation

Precipitin Tests

Protein Kinase C: DE, drug effects

Protein Kinase C: GE, genetics

*Protein Kinase C: ME, metabolism

Protein Kinase C-delta

Rats

Receptor, Insulin: DE, drug effects

*Receptor, Insulin: ME, metabolism

Recombinant Proteins: GE, genetics

Recombinant Proteins: ME, metabolism

Research Support, Non-U.S. Gov't

Serine: ME, metabolism

Tyrosine: ME, metabolism

RN 11061-68-0 (Insulin); 55520-40-6 (Tyrosine); 56-45-1 (Serine); 67763-96-6 (Insulin-Like Growth Factor I); 82-08-6 (rottlerin)

CN 0 (Acetophenones); 0 (Benzopyrans); 0 (Enzyme Inhibitors); 0 (Isoenzymes); 0 (Recombinant Proteins); EC 2.7.1.- (Prkcd protein, rat); EC 2.7.1.112 (Receptor, Insulin); EC 2.7.1.37 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-delta)

L130 ANSWER 53 OF 101 MEDLINE on STN

ACCESSION NUMBER: 2000065636 MEDLINE

DOCUMENT NUMBER: PubMed ID: 10598577

TITLE: Protein kinase Cdelta mediates insulin-induced glucose transport in primary cultures of rat skeletal muscle.

AUTHOR: Braiman L; Alt A; Kuroki T; Ohba M; Bak A; Tennenbaum T; Sampson S R

CORPORATE SOURCE: Faculty of Life Sciences, Gonda-Goldschmied Center, Bar-Ilan University, Ramat-Gan, Israel.

SOURCE: Molecular endocrinology (Baltimore, Md.), (1999 Dec) Vol. 13, No. 12, pp. 2002-12.

Journal code: 8801431. ISSN: 0888-8809.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200001
ENTRY DATE: Entered STN: 24 Jan 2000
Last Updated on STN: 24 Jan 2000
Entered Medline: 10 Jan 2000

ED Entered STN: 24 Jan 2000
Last Updated on STN: 24 Jan 2000
Entered Medline: 10 Jan 2000

AB Insulin activates certain protein kinase C (PKC) isoforms that are involved in insulin-induced glucose transport. In this study, we investigated the possibility that activation of PKCdelta by insulin participates in the mediation of insulin effects on glucose transport in skeletal muscle. Studies were performed on primary cultures of rat skeletal myotubes. The role of PKCdelta in insulin-induced glucose uptake was evaluated both by selective pharmacological blockade and by over-expression of wild-type and point-mutated inactive PKCdelta isoforms in skeletal myotubes. We found that insulin induces tyrosine phosphorylation and translocation of PKCdelta to the plasma membrane and increases the activity of this isoform. Insulin-induced effects on translocation and phosphorylation of PKCdelta were blocked by a low concentration of rottlerin, whereas the effects of insulin on other PKC isoforms were not. This selective blockade of PKCdelta by rottlerin also inhibited insulin-induced translocation of glucose transporter 4 (GLUT4), but not glucose transporter 3 (GLUT3), and significantly reduced the stimulation of glucose uptake by insulin. When overexpressed in skeletal muscle, PKCdelta and PKCdelta were both active. Overexpression of PKCdelta induced the translocation of GLUT4 to the plasma membrane and increased basal glucose uptake to levels attained by insulin. Moreover, insulin did not increase glucose uptake further in cells overexpressing PKCdelta. Overexpression of PKCdelta did not affect basal glucose uptake or GLUT4 location. Stimulation of glucose uptake by insulin in cells overexpressing PKCdelta was similar to that in untransfected cells. Transfection of skeletal myotubes with dominant negative mutant PKCdelta did not alter basal glucose uptake but blocked insulin-induced GLUT4 translocation and glucose transport. These results demonstrate that insulin activates PKCdelta and that activated PKCdelta is a major signaling molecule in insulin-induced glucose transport.

CT Acetophenones: PD, pharmacology
Animals
Benzopyrans: PD, pharmacology
Biological Transport: DE, drug effects
Cell Membrane: EN, enzymology
Cells, Cultured
Enzyme Activation
Enzyme Inhibitors: PD, pharmacology
Gene Expression
*Glucose: ME, metabolism
Glucose Transporter Type 3
Glucose Transporter Type 4
*Insulin: PD, pharmacology
Isoenzymes: AI, antagonists & inhibitors
Isoenzymes: GE, genetics
*Isoenzymes: ME, metabolism

Monosaccharide Transport Proteins: ME, metabolism

*Muscle Proteins

Muscle, Skeletal: DE, drug effects

*Muscle, Skeletal: EN, enzymology

*Nerve Tissue Proteins

Phosphorylation

Point Mutation

Protein Kinase C: AI, antagonists & inhibitors

Protein Kinase C: GE, genetics

*Protein Kinase C: ME, metabolism

Protein Kinase C-delta

Rats

Research Support, Non-U.S. Gov't

Transfection

RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 82-08-6 (rottlerin)

CN 0 (Acetophenones); 0 (Benzopyrans); 0 (Enzyme Inhibitors); 0 (Glucose Transporter Type 3); 0 (Glucose Transporter Type 4); 0 (Isoenzymes); 0 (Monosaccharide Transport Proteins); 0 (Muscle Proteins); 0 (Nerve Tissue Proteins); 0 (Slc2a3 protein, rat); 0 (Slc2a4 protein, rat); EC 2.7.1.- (Prkcd protein, rat); EC 2.7.1.37 (Protein Kinase C); EC 2.7.1.37 (Protein Kinase C-delta)

L130 ANSWER 54 OF 101 MEDLINE on STN

ACCESSION NUMBER: 1999105950 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9888840

TITLE: Hypoglycemic prodrugs of 4-(2,2-dimethyl-1-oxopropyl)benzoic acid.

AUTHOR: Aicher T D; Bebernitz G R; Bell P A; Brand L J; Dain J G; Deems R; Fillers W S; Foley J E; Knorr D C; Nadelson J;

Otero D A; Simpson R; Strohschein R J; Young D A

CORPORATE SOURCE: Novartis Institute for Biomedical Research, 556 Morris Avenue, Summit, New Jersey 07901, USA.

SOURCE: Journal of medicinal chemistry, (1999 Jan 14)
Vol. 42, No. 1, pp. 153-63.

Journal code: 9716531. ISSN: 0022-2623.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199902

ENTRY DATE: Entered STN: 23 Feb 1999

Last Updated on STN: 23 Feb 1999

Entered Medline: 11 Feb 1999

ED Entered STN: 23 Feb 1999

Last Updated on STN: 23 Feb 1999

Entered Medline: 11 Feb 1999

AB SAH 51-641 (1) is a potent hypoglycemic agent, which acts by inhibiting hepatic gluconeogenesis. It is a prodrug of 4-(2,2-dimethyl-1-oxopropyl)benzoic acid (2) and 4-(2,2-dimethyl-1-hydroxypropyl)benzoic acid (3), which sequester coenzyme A (CoA) in the mitochondria, and inhibits medium-chain acyltransferase. 1-3 and 4-tert-butylbenzoic acid all cause testicular degeneration in rats at pharmacologically active doses. 14b (FOX 988) is a prodrug of 3, which is metabolized in the liver at a rate sufficient enough to have hypoglycemic potency (an ED₅₀ of 65 micromol/kg, 28 mg/kg/day, for glucose lowering), yet by avoiding significant escape of the metabolite 3 to the systemic circulation, it avoids the testicular toxicity at doses up

to 1500 micromol/kg/day. 14b was selected for clinical studies.

CT Check Tags: Male

*Acetophenones: CS, chemical synthesis
Acetophenones: CH, chemistry
Acetophenones: PD, pharmacology

Animals

*Benzoates: CS, chemical synthesis
Benzoates: CH, chemistry
Benzoates: PD, pharmacology
Benzoic Acids: BL, blood
*uBenzoic Acids: CS, chemical synthesis
Benzoic Acids: CH, chemistry
Benzoic Acids: PD, pharmacology

Diabetes Mellitus, Experimental: DT, drug therapy

Drug Evaluation, Preclinical

Fatty Acids: ME, metabolism

Gluconeogenesis

Hypoglycemic Agents: BL, blood
*Hypoglycemic Agents: CS, chemical synthesis
Hypoglycemic Agents: CH, chemistry
Hypoglycemic Agents: PD, pharmacology

In Vitro

Liver: CY, cytology
Liver: DE, drug effects
Liver: ME, metabolism

Oxidation-Reduction

*Prodrugs: CS, chemical synthesis
Prodrugs: CH, chemistry
Prodrugs: PD, pharmacology

Rats

Rats, Sprague-Dawley

Stereoisomerism

Structure-Activity Relationship

Testis: DE, drug effects

Testis: ME, metabolism

CN 0 (4-(2,2-dimethyl-1-hydroxypropyl)benzoic acid); 0 (4-(2,2-dimethyl-1-oxopropyl)benzoic acid); 0 (Acetophenones); 0 (Benzoates); 0 (Benzoic Acids); 0 (Fatty Acids); 0 (Hypoglycemic Agents); 0 (Prodrugs); 0 (SDZ FOX 988)

L130 ANSWER 55 OF 101 MEDLINE on STN

ACCESSION NUMBER: 97197372 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9044432

TITLE: Increased PLA2 activity is not related to increase GLUT1 expression in L6 myotubes under hypoxic conditions.

AUTHOR: Kozlovsky N; Shohami E; Bashan N

CORPORATE SOURCE: Pediatric Research Laboratory, Soroka Medical Center, Beer-Sheva, Israel.

SOURCE: Prostaglandins, leukotrienes, and essential fatty acids, (1997 Jan) Vol. 56, No. 1, pp. 17-22.
Journal code: 8802730. ISSN: 0952-3278.

PUB. COUNTRY: SCOTLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199705

ENTRY DATE: Entered STN: 14 May 1997

2005/05/05

2005/05/05

Zhang 10/699,338

and 10/699,

12/06/2006

Last Updated on STN: 14 May 1997
Entered Medline: 8 May 1997

- ED Entered STN: 14 May 1997
Last Updated on STN: 14 May 1997
Entered Medline: 8 May 1997
- AB Incubation of L6 myotubes for 24 h under hypoxic conditions leads to a 5.8 +/- 1.2 fold increase in 2-deoxyglucose uptake. In those conditions phospholipase A2 is activated, leading to a 2.4 +/- 0.8 fold increased release of arachidonic acid (AA) to the medium, and to 95% increased synthesis of PGF2 alpha but not of PGE2 as compared to cells incubated in normoxic conditions. Under hypoxia, the PLA2 inhibitor bromophenacyl bromide (BPB) inhibited AA release and PGF2 alpha synthesis, yet it did not affect the increase in glucose uptake into L6 myotubes. The amount of GLUT1 immunoreactive proteins in total membranes of hypoxia treated cells was evaluated 5.1 +/- 1.2 fold compared to control cells. Neither 10 microM BPB nor 100 mM aspirin (ASA) prevented this increase in GLUT1 expression. Preincubation of myotubes for either 1 or 23 h with 50 microM exogenous AA, prevented insulin induced 2-deoxyglucose uptake stimulation, suggesting that although AA or one of its metabolites did not regulate the synthesis or stability of GLUT1, it may interfere with the signal transduction of insulin in muscle cells.
- CT Acetophenones: PD, pharmacology
Animals
Arachidonic Acid: ME, metabolism
Biological Transport: DE, drug effects
Cell Hypoxia
Cell Line
Cyclooxygenase Inhibitors: PD, pharmacology
Deoxyglucose: ME, metabolism
Glucose: ME, metabolism
Glucose Transporter Type 1
Glucose Transporter Type 4
Insulin: PD, pharmacology
Membrane Proteins: ME, metabolism
*Monosaccharide Transport Proteins: BI, biosynthesis
Monosaccharide Transport Proteins: ME, metabolism
*Muscle Proteins
Muscle, Skeletal: CY, cytology
*Muscle, Skeletal: ME, metabolism
*Phospholipases A: ME, metabolism
Prostaglandins: ME, metabolism
Quinacrine: PD, pharmacology
Rats
Signal Transduction: DE, drug effects
Signal Transduction: PH, physiology
- RN 11061-68-0 (Insulin); 154-17-6 (Deoxyglucose); 50-99-7 (Glucose); 506-32-1 (Arachidonic Acid); 83-89-6 (Quinacrine); 99-73-0 (4-bromophenacyl bromide)
- CN 0 (Acetophenones); 0 (Cyclooxygenase Inhibitors); 0 (Glucose Transporter Type 1); 0 (Glucose Transporter Type 4); 0 (Membrane Proteins); 0 (Monosaccharide Transport Proteins); 0 (Muscle Proteins); 0 (Prostaglandins); 0 (Slc2a1 protein, rat); 0 (Slc2a4 protein, rat); EC 3.1.1.- (Phospholipases A)

L130 ANSWER 56 OF 101 MEDLINE on STN
ACCESSION NUMBER: 96214690 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8643029

TITLE: Effect of 3-amino-1-propanol, indomethacin and
 4-bromophenacyl bromide on the hormone binding of insulin
 pretreated Tetrahymena: influence of phospholipid
 metabolism disturbances on hormonal imprinting.
 AUTHOR: Kovacs P; Csaba G
 CORPORATE SOURCE: Department of Biology, Semmelweis University of Medicine,
 Budapest, Hungary.
 SOURCE: Microbios, (1995) Vol. 84, No. 341, pp. 255-61.
 Journal code: 0207257. ISSN: 0026-2633.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199607
 ENTRY DATE: Entered STN: 26 Jul 1996
 Last Updated on STN: 26 Jul 1996
 Entered Medline: 15 Jul 1996
 ED Entered STN: 26 Jul 1996
 Last Updated on STN: 26 Jul 1996
 Entered Medline: 15 Jul 1996
 AB The compound 3-amino-1-propanol which replaces ethanolamine in
 phosphatidyl-ethanolamine and inhibits transformation of it, hindered
 insulin imprinting of Tetrahymena. Indomethacin, an inhibitor of
 prostaglandin synthesis and arachidonate metabolism provoked negative
 imprinting. 4-Bromophenacyl bromide, a phospholipase A2 inhibitor,
 hindered imprintability by insulin. Immediately after treatment these
 substances inhibited insulin binding. The experiment calls attention to
 the importance of intactness of metabolic pathways and second messenger
 systems in the mechanism of imprinting.
 CT Acetophenones: PD, pharmacology
 Animals
 Cyclooxygenase Inhibitors: PD, pharmacology
 *Enzyme Inhibitors: PD, pharmacology
 *Fluorescein-5-isothiocyanate: AA, analogs & derivatives
 Fluorescein-5-isothiocyanate: ME, metabolism
 Fluorescein-5-isothiocyanate: PD, pharmacology
 Indomethacin: PD, pharmacology
 *Insulin: AA, analogs & derivatives
Insulin: ME, metabolism
Insulin: PD, pharmacology
 Phospholipases A: AI, antagonists & inhibitors
 *Phospholipids: ME, metabolism
 *Propanolamines: PD, pharmacology
 *Tetrahymena pyriformis: DE, drug effects
 Tetrahymena pyriformis: ME, metabolism
 RN 11061-68-0 (Insulin); 3326-32-7 (Fluorescein-5-isothiocyanate); 53-86-1
 (Indomethacin); 99-73-0 (4-bromophenacyl bromide)
 CN 0 (Acetophenones); 0 (Cyclooxygenase Inhibitors); 0 (Enzyme Inhibitors); 0
 (Phospholipids); 0 (Propanolamines); 0 (insulin, fluorescein-
 isothiocyanated-); EC 3.1.1.- (Phospholipases A)

L130 ANSWER 57 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 95306733 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 7787131
 TITLE: The effect of food on the absorption of 14C-SDZ FOX 988, an
 antidiabetic agent, in healthy human volunteers.
 AUTHOR: Lau D T; Kalafsky G; Tse F L

CORPORATE SOURCE: Drug Metabolism and Pharmacokinetics Department, Drug Safety, Sandoz Research Institute, Sandoz Pharmaceuticals Corporation, East Hanover, NJ 07936, USA.

SOURCE: Biopharmaceutics & drug disposition, (1995 Apr)
Vol. 16, No. 3, pp. 191-200.
Journal code: 7911226. ISSN: 0142-2782.

PUB. COUNTRY: ENGLAND: United Kingdom
(CLINICAL TRIAL)

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199507

ENTRY DATE: Entered STN: 7 Aug 1995
Last Updated on STN: 7 Aug 1995
Entered Medline: 27 Jul 1995

ED Entered STN: 7 Aug 1995
Last Updated on STN: 7 Aug 1995
Entered Medline: 27 Jul 1995

AB The objective of this study is to examine the effect of food on oral absorption of SDZ FOX 988 (FOX 988), an antidiabetic agent, and circulating levels of its active metabolite, SDZ 53-450 (53-450). Sixteen normal volunteers received a single 10 mg dose of 14C-FOX 988, either as gelatin capsules or in a suspension (0.5% CMC). For subjects receiving each formulation, four subjects received a meal, consisting of 50% fat by calories, immediately following dosing, while the other four received the same meal at 2 h post-dose. Serial blood, urine, and fecal samples were collected for 120 h and analyzed for total radioactivity. Blood concentrations of 53-450 were analyzed using an HPLC-UV method. Concomitant administration with food increased the extent of FOX 988 absorption from either suspension or capsule, as shown by an increase in AUC and in urinary recovery of radioactivity. Blood concentrations of 53-450 were only detected in subjects receiving food at dosing. No difference in absorption was observed between the capsule and the suspension. Results from this study showed that oral absorption of FOX 988 is enhanced by co-administration of food in normal volunteers.

CT Absorption
*Acetophenones: PK, pharmacokinetics
 *Benzoates: PK, pharmacokinetics
 Carbon Radioisotopes: DU, diagnostic use
 Food
 Humans
*Hypoglycemic Agents: PK, pharmacokinetics

CN 0 (Acetophenones); 0 (Benzoates); 0 (Carbon Radioisotopes); 0 (Hypoglycemic Agents); 0 (SDZ FOX 988)

L130 ANSWER 58 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 95299038 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 7780047
 TITLE: The effect of the fat content of food on the pharmacokinetics and pharmacodynamics of SDZ FOX 988, an antidiabetic agent, in the dog.

AUTHOR: Lau D T; Kalafsky G; Aun R L; Tse F L
 CORPORATE SOURCE: Drug Metabolism and Pharmacokinetics Department, Sandoz Research Institute, Sandoz Pharmaceuticals Corporation, East Hanover, NJ 07936, USA.
 SOURCE: Biopharmaceutics & drug disposition, (1995 Mar)

Vol. 16, No. 2, pp. 137-50.
Journal code: 7911226. ISSN: 0142-2782.

PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199507
ENTRY DATE: Entered STN: 26 Jul 1995
Last Updated on STN: 29 Jan 1999
Entered Medline: 14 Jul 1995

ED Entered STN: 26 Jul 1995
Last Updated on STN: 29 Jan 1999
Entered Medline: 14 Jul 1995

AB SDZ FOX 988 (FOX 988) is being developed for the treatment of type II diabetes. The objective of this study was to examine the effect of the fat content of food on the pharmacokinetics and pharmacodynamics of FOX 988 following oral administration in the dog. In a randomized, cross-over design, four dogs received a single 10 mg kg⁻¹ dose of 14C-FOX 988 suspension concomitantly with food containing 10% fat or 40% fat, or with the 10% fat food at 4 h post-dose. Serial blood, urine, and fecal samples were collected for 96 h and analyzed for total radioactivity. Blood concentrations of 53-450, the active metabolite of FOX 988, were also determined. Serum concentrations of beta-hydroxybutyrate and glucose, pharmacological markers for the antidiabetic effects, were measured serially for 24 h after dosing. The animals receiving the low-fat meal at dosing and at 4 h post-dose exhibited similar extents of absorption, as shown by similar AUC values and urinary radioactivity recovery. Administration of the high-fat meal at dosing significantly enhanced the absorption of FOX 988 and resulted in high blood concentrations of 53-450. However, no significant differences in the pharmacological activity of the drug were observed among the three treatments.

CT Check Tags: Male
3-Hydroxybutyric Acid
Absorption
 Acetophenones: AD, administration & dosage
 *Acetophenones: PK, pharmacokinetics
 *Acetophenones: PD, pharmacology

Administration, Oral

Animals

Benzoates: AD, administration & dosage

Benzoates: BL, blood

*Benzoates: PK, pharmacokinetics

*Benzoates: PD, pharmacology

Blood Glucose: ME, metabolism

Diabetes Mellitus, Type 2: DT, drug therapy

Diabetes Mellitus, Type 2: ME, metabolism

*Dietary Fats: AD, administration & dosage

Dietary Fats: AN, analysis

Dogs

Food Analysis

Humans

Hydroxybutyrates: BL, blood

Hypoglycemic Agents: AD, administration & dosage

*Hypoglycemic Agents: PK, pharmacokinetics

*Hypoglycemic Agents: PD, pharmacology

RN 300-85-6 (3-Hydroxybutyric Acid)

CN 0 (Acetophenones); 0 (Benzoates); 0 (Blood Glucose); 0 (Dietary Fats); 0 (Hydroxybutyrates); 0 (Hypoglycemic Agents); 0 (SDZ 53-450); 0 (SDZ FOX 988)

L130 ANSWER 59 OF 101 MEDLINE on STN

ACCESSION NUMBER: 94308061 MEDLINE

DOCUMENT NUMBER: PubMed ID: 8034579

TITLE: Glucose-glucose 6-phosphate cycling in hepatocytes determined by incorporation of ^3HOH and D_2O . Effect of glycosyns and fructose.

AUTHOR: Wals P A; Katz J

CORPORATE SOURCE: Cedars Sinai Medical Center, Los Angeles, California 90048.

CONTRACT NUMBER: R01 DK36449 (NIDDK)

SOURCE: The Journal of biological chemistry, (1994 Jul 15)
Vol. 269, No. 28, pp. 18343-52.

Journal code: 2985121R. ISSN: 0021-9258.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199408

ENTRY DATE: Entered STN: 25 Aug 1994

Last Updated on STN: 29 Jan 1996

Entered Medline: 17 Aug 1994

ED Entered STN: 25 Aug 1994

Last Updated on STN: 29 Jan 1996

Entered Medline: 17 Aug 1994

AB The phosphorylation of glucose and recycling between glucose and glucose-6-P was determined in hepatocytes from fasted rats by a novel method. The cells were incubated with [^3H]glucose as sole substrate in media containing ^3HOH and D_2O . Recycling was calculated from the yield of protons in glucose and glycogen. Results with ^3HOH and D_2O were identical. Phosphorylation was obtained as the sum of recycling plus the ^3H yields in products. At 10 mM glucose, more than 4 out of 5 molecules of glucose-6-P were recycled. About 1.2 μmol of glucose min/g of liver was phosphorylated, 1 μmol was recycled, and 0.2 μmol was glycolyzed. The effect of two phenacylimidazolium compounds (designated as glycosyns) and low concentrations of fructose (0.05-0.2 mM) on phosphorylation and recycling were examined. The glycosyns doubled glucose uptake, mainly as glycogen, nearly abolished glycolysis, and decreased recycling from 80 to 50-60%. There was little change in phosphorylation. Fructose doubled the yield of tritium from [^3H]glucose in short term incubations (20-30 min), confirming the results of Van Schaftingen ((1993) Diabetologia 36, 582-588). The effect was transient, and cells became refractory to fructose. There was no glycogen synthesis and little effect on recycling. A new phenacylimidazolium compound stimulated glycogen synthesis and suppressed glycolysis and recycling, like the compound designated as proglycosyn by Yamanuchi et al. ((1992) Arch. Biochem. Biophys. 294, 609-615). This new compound (glycosyn-2) was fully active at lower concentrations (maximal effect at 0.02 mM).

CT Check Tags: Male

Acetophenones: PD, pharmacology

Animals

Carbon Radioisotopes

Cells, Cultured

*Deuterium Oxide: ME, metabolism

*Fructose: PD, pharmacology
 *Glucose: ME, metabolism
 Glucose-6-Phosphate
 *Glucosephosphates: ME, metabolism
 Glycolysis
*Hypoglycemic Agents: PD, pharmacology

*Imidazoles: PD, pharmacology
 Kinetics
 *Lactates: ME, metabolism
 Liver: DE, drug effects
 *Liver: ME, metabolism
 Liver Glycogen: BI, biosynthesis
 Rats
 Rats, Sprague-Dawley
 Research Support, U.S. Gov't, P.H.S.
 Tritium
 *Water: ME, metabolism

RN 10028-17-8 (Tritium); 103793-22-2 (proglycosyn); 121704-63-0 (glycosyn 2);
 30237-26-4 (Fructose); 50-99-7 (Glucose); 56-73-5 (Glucose-6-Phosphate);
 7732-18-5 (Water); 7789-20-0 (Deuterium Oxide)
 CN 0 (Acetophenones); 0 (Carbon Radioisotopes); 0 (Glucosephosphates); 0 (
Hypoglycemic Agents); 0 (Imidazoles); 0 (Lactates); 0 (Liver
 Glycogen)

L130 ANSWER 60 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 93279411 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 8504883
 TITLE: Pharmacological interference with phospholipase A2 activity
 reveals mechanistic differences between glucose and
 glyceraldehyde induced insulin release: implication for
 coupling of glucose metabolism to phospholipase A2
 activity.

AUTHOR: Tadayyon M; Green I C
 CORPORATE SOURCE: Biochemistry Laboratory, School of Biological Sciences,
 University of Sussex, Falmer, Brighton, England.
 SOURCE: Diabete & metabolisme, (1993 Jan-Feb) Vol. 19,
 No. 1, pp. 36-43.
 Journal code: 7604157. ISSN: 0338-1684.

PUB. COUNTRY: France
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199307
 ENTRY DATE: Entered STN: 16 Jul 1993
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 6 Jul 1993

ED Entered STN: 16 Jul 1993

Last Updated on STN: 3 Feb 1997

Entered Medline: 6 Jul 1993

AB Prostaglandin E2 levels in isolated rat islets were increased from 64 +/-
 11 pg/30 islets when incubated in medium containing 2 mM glucose to 115
 +/- 9 pg/30 islets in medium containing 20 mM glucose. In contrast,
 glyceraldehyde (10 mM) reduced prostaglandin E2 levels to 29 +/- 6 pg/30
 islets. Inhibition of glucose metabolism by mannoheptulose (10 mM)
 abolished the stimulatory effect of glucose on prostaglandin E2 levels and
 inhibited glucose-induced insulin release. The cyclooxygenase inhibitor,
 flurbiprofen (20 microM), did not affect insulin release caused by glucose

or glyceraldehyde. In the presence of 1 mg/ml bovine serum albumin, insulin secretion induced by 20 mM glucose (6.9 +/- 1.1% of islet insulin content) was reduced by the lipoxygenase inhibitor BW755 C (20 microM) to 3.1 +/- 0.6%, and by the phospholipase A2 inhibitor, p-bromophenacyl bromide (10 microM), to 2.1 +/- 0.8%. In the absence of bovine serum albumin the inhibitory action of BW755 C and p-bromophenacyl bromide on glucose-induced insulin release was significantly more pronounced. These drugs whether in the presence or absence of bovine serum albumin, did not affect glyceraldehyde-stimulated insulin secretion. Glyceraldehyde (10 mM), potentiated glucose-induced insulin release in the presence of 2-8 mM glucose, but not for 10-20 mM glucose. Although the phospholipase A2 activator, melittin, initiated insulin release in the presence of 2 mM glucose and enhanced 10 mM glyceraldehyde-stimulated insulin secretion it had no effect on 20 mM glucose-induced insulin release. These two stimulatory effects of melittin on insulin release were totally abolished by p-bromophenacyl bromide. (ABSTRACT TRUNCATED AT 250 WORDS)

CT Check Tags: Female

4,5-Dihydro-1-(3-(trifluoromethyl)phenyl)-1H-pyrazol-3-amine: PD, pharmacology

***Acetophenones: PD, pharmacology**

Animals

*Cyclooxygenase Inhibitors: PD, pharmacology

*Dinoprostone: ME, metabolism

Flurbiprofen: PD, pharmacology

*Glucose: ME, metabolism

*Glucose: PD, pharmacology

*Glyceraldehyde: PD, pharmacology

***Insulin: SE, secretion**

Islets of Langerhans: DE, drug effects

*Islets of Langerhans: ME, metabolism

Islets of Langerhans: SE, secretion

Kinetics

Melitten: PD, pharmacology

Phospholipases A: AI, antagonists & inhibitors

*Phospholipases A: ME, metabolism

Rats

Rats, Sprague-Dawley

Research Support, Non-U.S. Gov't

RN 11061-68-0 (Insulin); 20449-79-0 (Melitten); 363-24-6 (Dinoprostone); 367-47-5 (Glyceraldehyde); 50-99-7 (Glucose); 5104-49-4 (Flurbiprofen); 66000-40-6 (4,5-Dihydro-1-(3-(trifluoromethyl)phenyl)-1H-pyrazol-3-amine); 99-73-0 (4-bromophenacyl bromide)

CN 0 (Acetophenones); 0 (Cyclooxygenase Inhibitors); EC 3.1.1.-
(Phospholipases A)

L130 ANSWER 61 OF 101 MEDLINE on STN

ACCESSION NUMBER: 91301765 MEDLINE

DOCUMENT NUMBER: PubMed ID: 2071189

TITLE: A comparative study of biochemical changes induced by inhalation of aerosols of o-Chloroacetophenone & Dibenz (b,f)-1,4-oxazepine in rats.

AUTHOR: Husain K; Kumar P; Malhotra R C

CORPORATE SOURCE: Division of Toxicology & Pharmacology, Defence Research & Development Establishment, Gwalior.

SOURCE: The Indian journal of medical research, (1991 Feb)
Vol. 94, pp. 76-9.

Journal code: 0374701. ISSN: 0971-5916.

PUB. COUNTRY: India
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199108
 ENTRY DATE: Entered STN: 8 Sep 1991
 Last Updated on STN: 8 Sep 1991
 Entered Medline: 20 Aug 1991
 ED Entered STN: 8 Sep 1991
 Last Updated on STN: 8 Sep 1991
 Entered Medline: 20 Aug 1991
 AB The biochemical changes in blood samples of rats at different intervals after O-Chloroacetophenone (CN) and Dibenz (b,f)-1,4 oxazepine (CR) were studied. After a single subacute (1/10 LC50) exposure, both the compounds induced hyperglycaemia which was abolished within 24 h. The level of plasma urea was unaltered. CR exposed animals did not show any significant changes in plasma GOT, acid and alkaline phosphatase activities at different intervals. However, in CN exposed animals, a significant elevation of the activities of GOT, GPT, acid and alkaline phosphatase was observed at different intervals. All the parameters became normal within seven days after the exposure. Inhalation of CN aerosols can thus lead to tissue damaging effects in rats.

CT Check Tags: Male
 Aerosols
 Animals
 *Blood: ME, metabolism
 Comparative Study
 *Dibenzoazepines: PD, pharmacology
 Irritants: PD, pharmacology
 Rats
 Rats, Inbred Strains
 *omega-Chloroacetophenone: PD, pharmacology

RN 257-07-8 (dibenz(b,f)(1,4)oxazepine); 532-27-4 (omega-Chloroacetophenone)
 CN 0 (Aerosols); 0 (Dibenzoazepines); 0 (Irritants)

L130 ANSWER 62 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 89136931 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 2521822
 TITLE: Studies on the mechanisms causing inhibition of insulin secretion in rat pancreatic islets exposed to human interleukin-1 beta indicate a perturbation in the mitochondrial function.
 AUTHOR: Sandler S; Bendtzen K; Borg L A; Eizirik D L; Strandell E; Welsh N
 CORPORATE SOURCE: Department of Medical Cell Biology, Uppsala University, Sweden.
 SOURCE: Endocrinology, (1989 Mar) Vol. 124, No. 3, pp. 1492-501.
 Journal code: 0375040. ISSN: 0013-7227.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 198904
 ENTRY DATE: Entered STN: 6 Mar 1990
 Last Updated on STN: 6 Mar 1990
 Entered Medline: 3 Apr 1989

ED Entered STN: 6 Mar 1990

Last Updated on STN: 6 Mar 1990
Entered Medline: 3 Apr 1989

AB This study aimed at a more detailed characterization of the mechanisms by which interleukin 1 (IL-1) inhibits insulin secretion. For this purpose, isolated rat pancreatic islets were kept in tissue culture for 5 days in medium RPMI 1640 plus 10% calf serum. The islets were subsequently transferred to the same culture medium containing various test substances plus 1% human serum with or without 25 U/ml human recombinant IL-1 beta. After a culture period of 48 h the islet structure was examined in the electron microscope and the islet function studied in short term incubations in the absence of IL-1. Islets exposed to IL-1 showed ultrastructural signs of degeneration in 10-20% of the B cells while such changes were not found in other types of islet cells. An increased number of secondary lysosomes and occasional myelin figures were observed in the B cells exposed to IL-1. These ultrastructural alterations were, however, reversed in islets cultured in cytokine-free medium for 6 days after the IL-1 treatment. In islets cultured in the presence of 11.1 mM glucose only, or 11.1 mM glucose plus 10 mM nicotinamide, 61 mM dimethyl arachidonate, 2 micrograms/ml indomethacin, 10 microM 4-bromophenacyl bromide or 10 microM nordihydroguaiaretic acid, 10 microM phenantroline, and 0.1 or 1.0 microgram/ml cyclosporin A, IL-1 reduced the insulin release by 64-85%. Culture at 5.6 mM glucose did not modify the IL-1-induced inhibition of insulin release, whereas a significant protective effect was observed at 28 or 56 mM glucose. The DNA content in IL-1-exposed islets cultured at 11.1 mM glucose was decreased by about 20% but not in islets cultured at other glucose concentrations. The D-[5-3H]glucose utilization at 16.7 mM glucose was unaffected by IL-1, whereas the oxidation of D-[6-14C]glucose was reduced by 50%. The present results suggest that IL-1-induced inhibition of insulin secretion is related to a disturbed mitochondrial function. This effect is not counteracted by a poly(ADP-ribose) synthetase inhibitor, a hydroxyl radical scavenger, an iron chelator, a T lymphocyte-specific immunosuppressive drug, or inhibitors of phospholipase A2 or inhibitors of prostaglandin and leukotriene synthesis. Thus, IL-1-induced inhibition of insulin secretion seems not to be mediated by the same mechanisms as those causing alloxan- or streptozotocin-induced damage of B cells. Furthermore, the action of IL-1 does not appear to be mediated via arachidonic acid metabolism. Glucose affords some protection, probably by enhancing the B cell mitochondrial function. (ABSTRACT TRUNCATED AT 400 WORDS)

CT Check Tags: Male

Acetophenones: PD, pharmacology

Animals

Culture Techniques

Cyclosporins: PD, pharmacology

Cytoplasmic Granules: UL, ultrastructure

DNA: ME, metabolism

Glucose: PD, pharmacology

Indomethacin: PD, pharmacology

*Insulin: SE, secretion

*Interleukin-1: PD, pharmacology

Islets of Langerhans: DE, drug effects

*Islets of Langerhans: SE, secretion

Islets of Langerhans: UL, ultrastructure

Methylurea Compounds: PD, pharmacology

Microscopy, Electron

Mitochondria: DE, drug effects

*Mitochondria: PH, physiology
 Mitochondria: UL, ultrastructure
 Niacinamide: PD, pharmacology
 Nordihydroguaiaretic Acid: PD, pharmacology
 Phenanthrolines: PD, pharmacology

Rats

Rats, Inbred Strains

Recombinant Proteins

Research Support, Non-U.S. Gov't

RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 500-38-9 (Nordihydroguaiaretic Acid); 53-86-1 (Indomethacin); 598-94-7 (1,1-dimethylurea); 9007-49-2 (DNA); 98-92-0 (Niacinamide); 99-73-0 (4-bromophenacyl bromide)

CN 0 (Acetophenones); 0 (Cyclosporins); 0 (Interleukin-1); 0 (Methylurea Compounds); 0 (Phenanthrolines); 0 (Recombinant Proteins)

L130 ANSWER 63 OF 101 MEDLINE on STN

ACCESSION NUMBER: 90024002 MEDLINE

DOCUMENT NUMBER: PubMed ID: 2572177

TITLE: Central interleukin 1-elicited hyperinsulinemia is mediated by prostaglandins but not autonomic.

AUTHOR: Cornell R P

CORPORATE SOURCE: Division of Science, Northeast Missouri State University, Kirksville 63501.

SOURCE: The American journal of physiology, (1989 Oct)
 Vol. 257, No. 4 Pt 2, pp. R839-46.

JOURNAL code: 0370511. ISSN: 0002-9513.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198911

ENTRY DATE: Entered STN: 28 Mar 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 17 Nov 1989

ED Entered STN: 28 Mar 1990

Last Updated on STN: 6 Feb 1995

Entered Medline: 17 Nov 1989

AB This laboratory previously reported that centrally administered interleukin 1 (IL-1) in fasted pentobarbital-anesthetized rats elicited significant hyperinsulinemic and febrile responses. In characterizing this putative central mechanism for the regulation of pancreatic insulin secretion, hyperinsulinemia and fever elicited by IL-1 injected intravenously (iv) or intracerebroventricularly (icv) was totally eliminated by prior cyclooxygenase inhibition with indomethacin, ibuprofen, or meclofenamate but not lipoxygenase inhibition with propyl gallate or leukotriene receptor antagonism with LY 171883. Furthermore, central administration of prostaglandin E2 at 10 and 100 ng doses consistently evoked hyperinsulinemic, hypercorticotropinemic, and febrile responses in anesthetized rats maintained on isothermal pads. Beta-Adrenergic and vagus nerves to the pancreatic beta-cells seemed likely candidates to mediate the enhanced secretion of insulin elicited by IL-1 acting centrally. However, pretreatment of rats with hexamethonium, propanolol, atropine, or bilateral subdiaphragmatic vagotomy all failed to reduce hyperinsulinemia after IL-1 iv or icv. This evidence suggests that the central mechanism for enhanced pancreatic insulin secretion elicited by IL-1 may depend on a humoral rather than autonomic neural efferent pathway. Moreover, the hyperinsulinemia is mediated in part by

prostaglandins just like the well-studied febrile response.

CT Check Tags: Male

Acetophenones: PD, pharmacology

Animals

Atropine: PD, pharmacology

Autonomic Nervous System: DE, drug effects

*Autonomic Nervous System: PH, physiology

*Body Temperature: DE, drug effects

Cerebral Ventricle: DE, drug effects

*Cerebral Ventricle: PH, physiology

Corticotropin: BL, blood

Corticotropin: SE, secretion

*Dinoprostone: PD, pharmacology

Glucagon: BL, blood

Glucagon: SE, secretion

Hexamethonium

Hexamethonium Compounds: PD, pharmacology

*Hyperinsulinism: CI, chemically induced

Ibuprofen: PD, pharmacology

Indomethacin: PD, pharmacology

Injections, Intraventricular

Insulin: BL, blood

*Insulin: SE, secretion

Interleukin-1: AD, administration & dosage

*Interleukin-1: PD, pharmacology

Meclofenamic Acid: PD, pharmacology

Phentolamine: PD, pharmacology

Propranolol: PD, pharmacology

Propyl Gallate: PD, pharmacology

Rats

Reference Values

Research Support, U.S. Gov't, Non-P.H.S.

SRS-A: AI, antagonists & inhibitors

Tetrazoles: PD, pharmacology

Vagotomy

RN 11061-68-0 (Insulin); 121-79-9 (Propyl Gallate); 15687-27-1 (Ibuprofen);
 363-24-6 (Dinoprostone); 50-60-2 (Phentolamine); 51-55-8 (Atropine);
 525-66-6 (Propranolol); 53-86-1 (Indomethacin); 60-26-4 (Hexamethonium);
 644-62-2 (Meclofenamic Acid); 88107-10-2 (LY 171883); 9002-60-2
 (Corticotropin); 9007-92-5 (Glucagon)

CN 0 (Acetophenones); 0 (Hexamethonium Compounds); 0 (Interleukin-1); 0
 (SRS-A); 0 (Tetrazoles)

L130 ANSWER 64 OF 101 MEDLINE on STN

ACCESSION NUMBER: 89149784 MEDLINE

DOCUMENT NUMBER: PubMed ID: 2493246

TITLE: Mastoparan, a wasp venom, stimulates insulin release by
 pancreatic islets through pertussis toxin sensitive
 GTP-binding protein.

AUTHOR: Yokokawa N; Komatsu M; Takeda T; Aizawa T; Yamada T

CORPORATE SOURCE: Department of Gerontology, Endocrinology and Metabolism,
 School of Medicine, Shinshu University, Nagano-ken, Japan.

SOURCE: Biochemical and biophysical research communications,
(1989 Feb 15) Vol. 158, No. 3, pp. 712-6.

Journal code: 0372516. ISSN: 0006-291X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 198904
 ENTRY DATE: Entered STN: 6 Mar 1990
 Last Updated on STN: 18 Dec 2002
 Entered Medline: 3 Apr 1989
 ED Entered STN: 6 Mar 1990
 Last Updated on STN: 18 Dec 2002
 Entered Medline: 3 Apr 1989
 AB A wasp venom, mastoparan, rapidly stimulated insulin release by rat pancreatic islets in a dose-related manner. The amount of insulin released in response to 58 microM mastoparan far exceeded that induced by 27.8 mM glucose. Mastoparan stimulated insulin release to similar degrees at ambient glucose concentrations of 1.7 mM and 5.6 mM. The islets obtained from pertussis toxin-treated rats showed unequivocally less response to mastoparan. Pretreatment of islets with bromophenacyl bromide, a phospholipase A2 inhibitor, abolished their responsiveness to mastoparan. Pretreatment of islets with nifedipine, a Ca²⁺ channel blocker, was without effect. Mastoparan is a unique stimulator of insulin release by the pancreatic islets, which acts through GTP-binding protein(s) and phospholipase A2.
 CT Check Tags: Male
 Acetophenones: PD, pharmacology
 Animals
 *Bee Venoms: PD, pharmacology
 Comparative Study
 Dose-Response Relationship, Drug
 *GTP-Binding Proteins: PH, physiology
 Glucose: PD, pharmacology
 *Insulin: SE, secretion
 *Islets of Langerhans: SE, secretion
 Kinetics
 Nifedipine: PD, pharmacology
 Peptides
 *Pertussis Toxin
 Phospholipases A: AI, antagonists & inhibitors
 Phospholipases A: PH, physiology
 Rats
 Rats, Inbred Strains
 Research Support, Non-U.S. Gov't
 *Virulence Factors, Bordetella: PD, pharmacology
 *Wasp Venoms: PD, pharmacology
 RN 11061-68-0 (Insulin); 21829-25-4 (Nifedipine); 50-99-7 (Glucose);
 72093-21-1 (mastoparan); 99-73-0 (4-bromophenacyl bromide)
 CN 0 (Acetophenones); 0 (Bee Venoms); 0 (Peptides); 0 (Virulence Factors,
 Bordetella); 0 (Wasp Venoms); EC 2.4.2.31 (Pertussis Toxin); EC 3.1.1.-
 (Phospholipases A); EC 3.6.1.- (GTP-Binding Proteins)

L130 ANSWER 65 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 85224252 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 2988452
 TITLE: Aldose reductase inhibitors: flavonoids, alkaloids,
 acetophenones, benzophenones, and spirohydantoins of
 chroman.
 AUTHOR: Nakai N; Fujii Y; Kobashi K; Nomura K
 SOURCE: Archives of biochemistry and biophysics, (1985 Jun)
 Vol. 239, No. 2, pp. 491-6.

PUB. COUNTRY: Journal code: 0372430. ISSN: 0003-9861.
 DOCUMENT TYPE: United States
 LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
 FILE SEGMENT: English
 ENTRY MONTH: Priority Journals
 198507
 ENTRY DATE: Entered STN: 20 Mar 1990
 Last Updated on STN: 20 Mar 1990
 Entered Medline: 17 Jul 1985
 ED Entered STN: 20 Mar 1990
 Last Updated on STN: 20 Mar 1990
 Entered Medline: 17 Jul 1985
 AB The inhibitory activity of various compounds, including 12 flavonoids, 10 alkaloids, 15 benzophenones, 5 acetophenones, and 7 spirohydantoins of chroman, was tested on rabbit lens aldose reductase, an enzyme involved in complications of diabetes. Almost all compounds tested were found to inhibit the enzyme at low concentrations ($10(-5)$ M). The most potent inhibitor was 2R,4S-6-chloro-2-methylspiro(chroman-4,4'-imidazolidine-2',5'-dione with an I₅₀ value of $4.7 \times 10(-8)$ M; other spirohydantoins showed similar potency. Polyhydroxybenzophenones were also potent inhibitors with an I₅₀ value of about $10(-7)$ M. The possible structure-inhibitory activity relationships of the compounds tested are discussed.
 CT *Acetophenones: PD, pharmacology
 *Aldehyde Reductase: AI, antagonists & inhibitors
 *Alkaloids: PD, pharmacology
 Animals
 *Benzophenones: PD, pharmacology
 *Benzopyrans: PD, pharmacology
 Berberine: ME, metabolism
 *Chromans: PD, pharmacology
 DNA Restriction Enzymes: ME, metabolism
 *Deoxyribonucleases, Type II Site-Specific
 *Flavonoids: PD, pharmacology
 Lens, Crystalline: EN, enzymology
 Papaverine: ME, metabolism
 Rabbits
 *Sugar Alcohol Dehydrogenases: AI, antagonists & inhibitors
 RN 2086-83-1 (Berberine); 58-74-2 (Papaverine)
 CN 0 (Acetophenones); 0 (Alkaloids); 0 (Benzophenones); 0 (Benzopyrans); 0 (Chromans); 0 (Flavonoids); EC 1.1. (Sugar Alcohol Dehydrogenases); EC 1.1.1.21 (Aldehyde Reductase); EC 3.1.21 (DNA Restriction Enzymes); EC 3.1.21.- (endodeoxyribonuclease PstI); EC 3.1.21.4 (Deoxyribonucleases, Type II Site-Specific)

L130 ANSWER 66 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 84280174 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 6087837
 TITLE: Inhibition by mepacrine and p-bromophenacylbromide of phosphoinositide hydrolysis, glucose oxidation, calcium uptake and insulin release in rat pancreatic islets.
 AUTHOR: Best L; Sener A; Mathias P C; Malaisse W J
 SOURCE: Biochemical pharmacology, (1984 Aug 15) Vol. 33, No. 16, pp. 2657-62.
 Journal code: 0101032. ISSN: 0006-2952.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 198409
 ENTRY DATE: Entered STN: 20 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 7 Sep 1984
 ED Entered STN: 20 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 7 Sep 1984
 AB Mepacrine and p-bromophenacylbromide were both found to impair 3H-inositol phosphate production in response to both nutrient and hormone-neurotransmitter stimuli in islets prelabelled with 3H-inositol. Both drugs also inhibited net 45Ca uptake in response to glucose or glibenclamide and considerably modified the patterns of 45Ca and 86Rb efflux from perfused islets under both basal and glucose-stimulated conditions. In addition, the oxidation of [U-14C] glucose in islets was impaired by either mepacrine or p-bromophenacylbromide. These inhibitory effects were found to be concentration-related for both mepacrine (0.01-1.0 mM) and p-bromophenacylbromide (0.03-0.3 mM) and were accompanied, in general, by a similar degree of inhibition of insulin secretion. These results suggest that both mepacrine and p-bromophenacylbromide can inhibit phospholipase C activity in intact islets, but also impair 45Ca and 86Rb fluxes and oxidation of nutrients. The diversity of these drugs' inhibitory actions makes them unsuitable tools for examining the role of specific cellular processes in the regulation of islet function.
 CT *Acetophenones: PD, pharmacology
 Animals
 *Calcium: ME, metabolism
 Dose-Response Relationship, Drug
 *Glucose: ME, metabolism
 Hydrolysis
 In Vitro
 *Insulin: SE, secretion
 *Islets of Langerhans: ME, metabolism
 Oxidation-Reduction
 *Phosphatidylinositols: ME, metabolism
 Phospholipase C: AI, antagonists & inhibitors
 *Quinacrine: PD, pharmacology
 Rats
 Research Support, Non-U.S. Gov't
 Rubidium: ME, metabolism
 RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 7440-17-7 (Rubidium); 7440-70-2 (Calcium); 83-89-6 (Quinacrine); 99-73-0 (4-bromophenacyl bromide)
 CN 0 (Acetophenones); 0 (Phosphatidylinositols); EC 3.1.4.3 (Phospholipase C)

L130 ANSWER 67 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 85004415 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 6434360
 TITLE: Possible role of endogenous arachidonic acid metabolites in stimulated release of insulin and glucagon from the isolated, perfused rat pancreas.
 AUTHOR: Walsh M F; Pek S B
 CONTRACT NUMBER: AM-07245 (NIADDK)
 AM-20752 (NIADDK)
 AM-21192 (NIADDK)
 SOURCE: Diabetes, (1984 Oct) Vol. 33, No. 10, pp. 929-36.

Journal code: 0372763. ISSN: 0012-1797.

PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
 ENTRY MONTH: 198411
 ENTRY DATE: Entered STN: 20 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 9 Nov 1984

ED Entered STN: 20 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 9 Nov 1984

AB Enhancement of arachidonic acid metabolism results in increased insulin secretion. To determine which pathways of arachidonic acid metabolism were involved in this stimulation, we studied the effects of various inhibitors of arachidonate metabolism on arginine-induced insulin and glucagon secretion in the isolated, perfused rat pancreas. The release of PGE2 from the pancreas was monitored to document the efficacy of the inhibitory drugs. p-Bromophenacyl bromide, a phospholipase A2 inhibitor, diminished PGE2 release and significantly inhibited both the early and late phases of insulin and glucagon release in response to arginine. Flurbiprofen, a specific cyclooxygenase inhibitor, decreased the early phase of insulin release and inhibited both phases of arginine-stimulated glucagon secretion; these decreases were concurrent with a large inhibition of PGE2 release. Nordihydroguaiaretic acid, a lipoxygenase inhibitor, at a dose of 10(-5) M did not affect PGE2 release, inhibited the early phase of insulin release, and did not modify glucagon secretion. The combination of flurbiprofen and nordihydroguaiaretic acid, although the most potent in inhibiting PGE2, lowered only the early phase of insulin and had no effect on glucagon secretion. We conclude that: (1) endogenous cyclooxygenase-derived metabolites of arachidonic acid promote insulin and glucagon release, (2) endogenous lipoxygenase products preferentially stimulate insulin release, and (3) phospholipase A2 activity has an intrinsic modulatory effect on insulin and glucagon secretion.

CT Check Tags: Male
Acetophenones: PD, pharmacology

Animals

Arachidonic Acid

*Arachidonic Acids: ME, metabolism

Arginine: PD, pharmacology

Catechols: PD, pharmacology

Dinoprostone

Flurbiprofen: PD, pharmacology

*Glucagon: SE, secretion

***Insulin: SE, secretion**

*Islets of Langerhans: SE, secretion

Nordihydroguaiaretic Acid

Prostaglandins E: SE, secretion

Rats

Rats, Inbred Strains

Research Support, U.S. Gov't, P.H.S.

RN 11061-68-0 (Insulin); 363-24-6 (Dinoprostone); 500-38-9
 (Nordihydroguaiaretic Acid); 506-32-1 (Arachidonic Acid); 5104-49-4
 (Flurbiprofen); 74-79-3 (Arginine); 9007-92-5 (Glucagon); 99-73-0
 (4-bromophenacyl bromide)

CN 0 (Acetophenones); 0 (Arachidonic Acids); 0 (Catechols); 0 (Prostaglandins)

E)

L130 ANSWER 68 OF 101 MEDLINE on STN
ACCESSION NUMBER: 85012035 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6434899
TITLE: Role of arachidonate lipoxygenase and cyclooxygenase products in insulin and glucagon secretion from rat pancreatic islets.
AUTHOR: Morgan R O; Pek S B
CONTRACT NUMBER: AM 07245 (NIADDK)
AM 20752 (NIADDK)
AM 21192 (NIADDK)
SOURCE: Metabolism: clinical and experimental, (1984 Oct)
Vol. 33, No. 10, pp. 928-35.
Journal code: 0375267. ISSN: 0026-0495.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198411
ENTRY DATE: Entered STN: 20 Mar 1990
Last Updated on STN: 6 Feb 1998
Entered Medline: 9 Nov 1984
ED Entered STN: 20 Mar 1990
Last Updated on STN: 6 Feb 1998
Entered Medline: 9 Nov 1984
AB Rat pancreatic islets incubated in nutrient medium were used to study the role of endogenous arachidonic acid metabolism in pancreatic hormone secretion. Both glucose and fetal calf serum stimulated radioimmunoassayable PGE2 production and insulin secretion from islets. These effects were abolished by the phospholipase inhibitor p-bromophenacyl bromide or by concurrent inhibition of cyclooxygenase and lipoxygenase by flurbiprofen plus nordihydroguaiaretic acid (NDGA), respectively. Bromophenacyl bromide also inhibited glucagon secretion. When used alone, flurbiprofen caused a significant enhancement of glucose-induced insulin secretion that was attributed to reactive stimulation of lipoxygenase-product formation rather than to selective cyclooxygenase inhibition. NDGA given alone in the presence of stimulatory concentrations of glucose suppressed the normal eight-fold rise in insulin secretion, but caused a marked enhancement in glucagon secretion that could be overcome by simultaneous inclusion of flurbiprofen. We concluded that: (1) Increased metabolism of arachidonic acid in pancreatic islets amplifies the secretion of insulin and glucagon. (2) The lipoxygenase as well as the cyclooxygenase pathways of arachidonate metabolism participate in the amplification of insulin secretion. (3) The observations made in this study are inconclusive with respect to the involvement of the lipoxygenase and cyclooxygenase pathways in glucagon secretion; an inhibitory role for lipoxygenase pathway products is suggested.
CT Check Tags: Male
 Acetophenones: PD, pharmacology
 Animals
 Arachidonate Lipoxygenases
 Arachidonic Acid
 *Arachidonic Acids: ME, metabolism
 Arachidonic Acids: PD, pharmacology
 Arachidonic Acids: PH, physiology

STN 10/699,338

12/06/2006

Zhang 10/699,338

Zhang 10/699,338

12/06/2006

Blood Physiology

Catechols: PD, pharmacology

Cyclooxygenase Inhibitors

Flurbiprofen: PD, pharmacology

*Glucagon: SE, secretion

Glucose: PD, pharmacology

In Vitro

*Insulin: SE, secretion

*Islets of Langerhans: SE, secretion

*Lipoxygenase: ME, metabolism

Lipoxygenase Inhibitors

Nordihydroguaiaretic Acid

*Prostaglandin-Endoperoxide Synthases: ME, metabolism

Rats

Research Support, Non-U.S. Gov't

Research Support, U.S. Gov't, P.H.S.

RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 500-38-9 (Nordihydroguaiaretic Acid); 506-32-1 (Arachidonic Acid); 5104-49-4 (Flurbiprofen); 9007-92-5 (Glucagon); 99-73-0 (4-bromophenacyl bromide)

CN 0 (Acetophenones); 0 (Arachidonic Acids); 0 (Catechols); 0 (Cyclooxygenase Inhibitors); 0 (Lipoxygenase Inhibitors); EC 1.13.11.- (Arachidonate Lipoxygenases); EC 1.13.11.12 (Lipoxygenase); EC 1.14.99.1 (Prostaglandin-Endoperoxide Synthases)

L130 ANSWER 69 OF 101 MEDLINE on STN

ACCESSION NUMBER: 81021362 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7191296

TITLE: [In vitro stability and biotransformation of 3'-hydroxy-2-[N-methyl-N-(1,1-dimethyl-2-phenethyl)amino]acetophenone (TVX 960) (author's transl)]. In-vitro-Stabilitat und Biotransformation von 3'-Hydroxy-2-[N-methyl-N-(1,1-dimethyl-2-phenylethyl)amino]acetophenon (TVX 960).

AUTHOR: Dell H D; Donike M; Jacobi H; Kamp R

SOURCE: Arzneimittel-Forschung, (1980) Vol. 30, No. 7, pp. 1138-44.

Journal code: 0372660. ISSN: 0004-4172.

PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: German

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198011

ENTRY DATE: Entered STN: 16 Mar 1990

Last Updated on STN: 16 Mar 1990

Entered Medline: 20 Nov 1980

ED Entered STN: 16 Mar 1990

Last Updated on STN: 16 Mar 1990

Entered Medline: 20 Nov 1980

CT Acetophenones: BL, blood

*Acetophenones: ME, metabolism

Acetophenones: UR, urine

Animals

Biotransformation

Body Fluids: ME, metabolism

Dogs

Drug Stability

English Abstract

Gastric Juice: ME, metabolism

Humans

In Vitro

Intestines: ME, metabolism

Mephentermine: PD, pharmacology

Phentermine: PD, pharmacology

RN 100-92-5 (Mephentermine); 122-09-8 (Phentermine); 74956-63-1 (TVX 960)

CN 0 (Acetophenones)

L130 ANSWER 70 OF 101 MEDLINE on STN

ACCESSION NUMBER: 79224014 MEDLINE

DOCUMENT NUMBER: PubMed ID: 461463

TITLE: Inhibition of prolactin actions in mouse mammary gland explants by p-bromphenacyl bromide, a phospholipase A2 inhibitor.

AUTHOR: Rillema J A

SOURCE: Proceedings of the Society for Experimental Biology and Medicine. Society for Experimental Biology and Medicine (New York, N. Y.), (1979 Jul) Vol. 161, No. 3, pp. 355-7.

Journal code: 7505892. ISSN: 0037-9727.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197909

ENTRY DATE: Entered STN: 15 Mar 1990

Last Updated on STN: 15 Mar 1990

Entered Medline: 17 Sep 1979

ED Entered STN: 15 Mar 1990

Last Updated on STN: 15 Mar 1990

Entered Medline: 17 Sep 1979

CT Check Tags: Female

*Acetophenones: PD, pharmacology

Animals

Caseins: BI, biosynthesis

Culture Techniques

Insulin: PD, pharmacology

*Mammary Glands, Animal: DE, drug effects

Mammary Glands, Animal: ME, metabolism

Mice

*Phospholipases: AI, antagonists & inhibitors

Pregnancy

*Prolactin: AI, antagonists & inhibitors

RNA: BI, biosynthesis

Research Support, U.S. Gov't, P.H.S.

RN 11061-68-0 (Insulin); 63231-63-0 (RNA); 9002-62-4 (Prolactin)

CN 0 (Acetophenones); 0 (Caseins); EC 3.1.- (Phospholipases)

L130 ANSWER 71 OF 101 MEDLINE on STN

ACCESSION NUMBER: 80196985 MEDLINE

DOCUMENT NUMBER: PubMed ID: 546333

TITLE: [Anorexigenic activity of various derivatives of alpha-aminoacetophenone].

Actividad anorexigena de algunos derivados de la alpha-aminoacetofenona.

AUTHOR: Sanchez M S; Marin A; Forn J

SOURCE: Archivos de farmacologia y toxicologia, (1979 Dec)
 Vol. 5, No. 3, pp. 165-8.
 Journal code: 7601472. ISSN: 0304-8616.

PUB. COUNTRY: Spain
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: Spanish
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 198007
 ENTRY DATE: Entered STN: 15 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 22 Jul 1980

ED Entered STN: 15 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 22 Jul 1980

CT ***Acetophenones: PD, pharmacology**
 Animals

***Appetite Depressants**

Motor Activity: DE, drug effects

Rats

RN 613-89-8 (phenacylamine)

CN 0 (Acetophenones); 0 (Appetite Depressants)

L130 ANSWER 72 OF 101 MEDLINE on STN

ACCESSION NUMBER: 78043367 MEDLINE

DOCUMENT NUMBER: PubMed ID: 923643

TITLE: Studies on the capacity of mazindol and dita to act as uptake inhibitors or releasing agents for 3H-biogenic amines in rat brain tissue slices.

AUTHOR: Heikkila R E; Cabbat F S; Mytilineou C

SOURCE: European journal of pharmacology, (1977 Oct 15)
 Vol. 45, No. 4, pp. 329-33.

Journal code: 1254354. ISSN: 0014-2999.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197801

ENTRY DATE: Entered STN: 14 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 27 Jan 1978

ED Entered STN: 14 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 27 Jan 1978

AB The effects of the anorexic and stimulant agents mazindol and dita on 3H-biogenic amine uptake and release were determined. Mazindol and dita were very potent inhibitors of 3H-norepinephrine uptake into rat brain occipital cortex slices with ED₅₀ values (point of 50% inhibition of uptake) of 1.5 X 10(-9) M and 3.2 X 10(-9) M, respectively. Mazindol (ED₅₀ of 2.8 X 10(-7) M) and dita (ED₅₀ value of 8.5 X 10(-7) M) were also potent inhibitors of 3H-dopamine uptake into rat neostriatal slices and of 3H-serotonin uptake into whole brain slices (ED₅₀ values of 5.5 X 10(-7) M and 5.1 X 10(-7) M for mazindol and dita respectively). Both compounds proved however to be extremely weak releasing agents for the 3H-biogenic amines in the respective brain areas. The effects of mazindol and dita on uptake may help to explain some of their pharmacological properties.

CT Check Tags: Male

***Acetophenones: PD, pharmacology**

Animals

***Appetite Depressants: PD, pharmacology**

*Biogenic Amines: ME, metabolism

Brain: DE, drug effects

*Brain: ME, metabolism

*Imidazoles: PD, pharmacology

In Vitro

*Indoles: PD, pharmacology

*Mazindol: PD, pharmacology

Norepinephrine: ME, metabolism

Rats

Research Support, U.S. Gov't, P.H.S.

Serotonin: ME, metabolism

RN 22232-71-9 (Mazindol); 50-67-9 (Serotonin); 51-41-2 (Norepinephrine)

CN 0 (Acetophenones); 0 (Appetite Depressants); 0 (Biogenic Amines); 0
(Imidazoles); 0 (Indoles)

L130 ANSWER 73 OF 101 MEDLINE on STN

ACCESSION NUMBER: 77259905 MEDLINE

DOCUMENT NUMBER: PubMed ID: 898203

TITLE: Preclinical evaluation of DITA [3',4'-dichloro-2-(2-imidazolin-2-yl-thio)acetophenone hydrobromide]: a new anorexigenic agent.

AUTHOR: Abdallah A H

SOURCE: Toxicology and applied pharmacology, (1977 Aug)

Vol. 41, No. 2, pp. 329-35.

Journal code: 0416575. ISSN: 0041-008X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 197710

ENTRY DATE: Entered STN: 14 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 31 Oct 1977

ED Entered STN: 14 Mar 1990

Last Updated on STN: 3 Feb 1997

Entered Medline: 31 Oct 1977

CT Check Tags: Female; Male

Acetophenones: AD, administration & dosage***Acetophenones: PD, pharmacology****Acetophenones: TO, toxicity**

Animals

***Appetite Depressants**

Body Weight: DE, drug effects

Cats

Dextroamphetamine: PD, pharmacology

Diethylpropion: PD, pharmacology

Dogs

Drug Evaluation, Preclinical

Eating: DE, drug effects

Hemodynamic Processes: DE, drug effects

Imidazoles: AD, administration & dosage

Imidazoles: PD, pharmacology*Imidazoles: TO, toxicity**

Lethal Dose 50

Mice

2/00/2006 Zhang 10/699,338 702 10/699,338 12/06/2006

Mice, Inbred ICR
Motor Activity: DE, drug effects
Rats
Species Specificity
Time Factors

RN 51-64-9 (Dextroamphetamine); 90-84-6 (Diethylpropion)
CN 0 (Acetophenones); 0 (Appetite Depressants); 0 (Imidazoles)

L130 ANSWER 74 OF 101 MEDLINE on STN
ACCESSION NUMBER: 77209464 MEDLINE
DOCUMENT NUMBER: PubMed ID: 17704
TITLE: Effect of (3',4'-dichloro-2(2-imidazolin-2-yl-thio)-acetophenone hydrobromide) (DITA) on pulmonary and systemic arterial blood pressure: a comparison with diethylpropion.
AUTHOR: Abdallah A H; Roby D M
SOURCE: The Journal of pharmacy and pharmacology, (1977 May) Vol. 29, No. 5, pp. 318-9.
Journal code: 0376363. ISSN: 0022-3573.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197708
ENTRY DATE: Entered STN: 14 Mar 1990
Last Updated on STN: 3 Feb 1997
Entered Medline: 25 Aug 1977

ED Entered STN: 14 Mar 1990
Last Updated on STN: 3 Feb 1997
Entered Medline: 25 Aug 1977

CT Check Tags: Female; Male
*Acetophenones: PD, pharmacology

Animals

*Appetite Depressants: PD, pharmacology

*Blood Pressure: DE, drug effects

Comparative Study

*Diethylpropion: PD, pharmacology

Dogs

Femoral Artery

*Imidazoles: PD, pharmacology

Pulmonary Artery

Tachyphylaxis

RN 90-84-6 (Diethylpropion)

CN 0 (Acetophenones); 0 (Appetite Depressants); 0 (Imidazoles)

L130 ANSWER 75 OF 101 MEDLINE on STN
ACCESSION NUMBER: 77048628 MEDLINE
DOCUMENT NUMBER: PubMed ID: 991928
TITLE: Role of dopamine in the anorexigenic effect of DITA; comparison with d-amphetamine.
AUTHOR: Abdallah A H; Roby D M; Boeckler W H; Riley C C
SOURCE: European journal of pharmacology, (1976 Nov) Vol. 40, No. 1, pp. 39-44.
Journal code: 1254354. ISSN: 0014-2999.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 197701
 ENTRY DATE: Entered STN: 13 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 28 Jan 1977

ED Entered STN: 13 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 28 Jan 1977

AB The effects of d,l-alpha-methyltyrosine (alphaMT), haloperidol, phenoxybenzamine, propranolol, methysergide and cyproheptadine on the anorexigenic activities of DITA and d-amphetamine were studied in male mice. The pretreatment of mice with methysergide (10 mg/kg, s.c.), cyproheptadine (5 mg/kg, i.p.), phenoxybenzamine (10 mg/kg, i.p.), and propranolol (5 mg/kg, i.p.) failed to alter the anorexigenic effect of DITA and d-amphetamine. On the other hand, alphaMT (32 mg/kg, i.p.) and haloperidol (0.5 mg/kg, i.p.) significantly antagonized the anorexigenic effect of DITA and d-amphetamine. Our data indicate that the anorexigenic activities of DITA and d-amphetamine are mediated mainly through the dopaminergic system.

CT Check Tags: Male
 Acetophenones: AI, antagonists & inhibitors
 *uAcetophenones: PD, pharmacology
 Animals
 Appetite Depressants: AI, antagonists & inhibitors
 *uAppetite Depressants: PD, pharmacology
 Comparative Study
 Cyproheptadine: PD, pharmacology
 Dextroamphetamine: AI, antagonists & inhibitors
 *Dextroamphetamine: PD, pharmacology
 *Dopamine: ME, metabolism
 *Eating: DE, drug effects
 Haloperidol: PD, pharmacology
 Imidazoles: AI, antagonists & inhibitors
 *Iimidazoles: PD, pharmacology
 Methyltyrosines: PD, pharmacology
 Methysergide: PD, pharmacology
 Mice
 Phenoxybenzamine: PD, pharmacology
 Propranolol: PD, pharmacology

RN 129-03-3 (Cyproheptadine); 361-37-5 (Methysergide); 51-61-6 (Dopamine);
 51-64-9 (Dextroamphetamine); 52-86-8 (Haloperidol); 525-66-6
 (Propranolol); 59-96-1 (Phenoxybenzamine)

CN 0 (Acetophenones); 0 (Appetite Depressants); 0 (Imidazoles); 0
 (Methyltyrosines)

L130 ANSWER 76 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 76012541 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 1161990
 TITLE: Food- and drug-reinforced responding: effects of DITA and d-amphetamine.
 AUTHOR: Downs D A; Woods J H
 SOURCE: Psychopharmacologia, (1975 Jul 23) Vol. 43, No. 1, pp. 13-7.
 Journal code: 7609417. ISSN: 0033-3158.
 PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals

ENTRY MONTH: 197512
 ENTRY DATE: Entered STN: 13 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 4 Dec 1975

ED Entered STN: 13 Mar 1990
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 4 Dec 1975

AB Intravenous pretreatment with DITA (0.1 - 1.0 mg/kg), decreased the rate of food-reinforcement lever pressing in rhesus monkeys. Response rate decreases were dose-dependent but showed the development of tolerance. Self-administration of DITA was initiated and maintained in each of three monkeys when 30 lever presses were required to produce each injection. Maximal response rate during periods of drug availability was maintained by 0.03 mg/kg/injection while higher and lower doses (0.01 and 0.10 mg/kg/injection) maintained lower response rates. Response rate in periods of food availability immediately preceding drug periods was relatively constant across session; response rate in periods of food availability immediately following drug periods, however, decreased with increasing amounts of drug self-administered. Replication of initial self-administration doses produced results comparable to original determinations in contrast to the tolerance observed with DITA effects upon food-reinforced responding. DITA was about 3 times less potent than d-amphetamine in maintaining response rates in drug periods and in decreasing the rate of subsequent food-reinforced responding.

CT Check Tags: Male
 Acetophenones: AD, administration & dosage
 *Acetophenones: PD, pharmacology
 Animals
 Appetite Depressants: AD, administration & dosage
 *Appetite Depressants: PD, pharmacology
 Conditioning, Operant
 Dextroamphetamine: AD, administration & dosage
 *Dextroamphetamine: PD, pharmacology
 Feeding Behavior: DE, drug effects
 Imidazoles: AD, administration & dosage
 Imidazoles: PD, pharmacology
 Injections, Intravenous
 Macaca mulatta
 Reaction Time: DE, drug effects
 *Reinforcement (Psychology): DE, drug effects
 Research Support, U.S. Gov't, Non-P.H.S.

RN 51-64-9 (Dextroamphetamine)

CN 0 (Acetophenones); 0 (Appetite Depressants); 0 (Imidazoles)

L130 ANSWER 77 OF 101 MEDLINE on STN
 ACCESSION NUMBER: 69217377 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 5729955
 TITLE: Purification and characterization of a proteolytic enzyme from *Candida albicans*.
 AUTHOR: Remold H; Fasold H; Staib F
 SOURCE: *Biochimica et biophysica acta*, (1968 Oct 8) Vol. 167, No. 2, pp. 399-406.
 Journal code: 0217513. ISSN: 0006-3002.
 PUB. COUNTRY: Netherlands
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals

ENTRY MONTH: 196908
ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 7 Aug 1969

ED Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 7 Aug 1969

CT **Acetophenones**
Azo Compounds
*Candida: EN, enzymology
Centrifugation, Density Gradient
Chromatography, Gel
Chromatography, Ion Exchange
Electrophoresis, Disc
Esters
Hydrogen-Ion Concentration

Insulin

Molecular Weight
*Peptide Hydrolases: IP, isolation & purification
Serum Albumin, Bovine

RN 11061-68-0 (Insulin)

CN 0 (Acetophenones); 0 (Azo Compounds); 0 (Esters); 0 (Serum Albumin, Bovine); EC 3.4.- (Peptide Hydrolases)

L130 ANSWER 78 OF 101 MEDLINE on STN

ACCESSION NUMBER: 66032380 MEDLINE

DOCUMENT NUMBER: PubMed ID: 5838236

TITLE: [Relations between the amine and alcohol functions of adrenaline and its hyperglycemic action.
Comparative actions in the rabbit (intravenous route) of noradrenaline, ethylnoradrenaline and isoprenaline; of adrenalone, hydroxytyramine and epinine].
Relations entre les fonctions amine et alcool de l'adrenaline et son action hyperglycemante.
Actions comparees chez le lapin (voie intraveineuse) de la noradrenaline, de l'ethylnoradrenaline et de l'isoprenaline; de l'adrenalone, de l'hydroxytyramine et de l'epinine.

AUTHOR: Hazard R; Mouille P
SOURCE: Journal de physiologie, (1965 May-Jun) Vol. 57,
No. 3, pp. 399-406.
Journal code: 9309350. ISSN: 0021-7948.

PUB. COUNTRY: France

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: French

FILE SEGMENT: Priority Journals

ENTRY MONTH: 196601

ENTRY DATE: Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 8 Jan 1966

ED Entered STN: 1 Jan 1990
Last Updated on STN: 1 Jan 1990
Entered Medline: 8 Jan 1966

CT ***Acetophenones: PD, pharmacology**
Animals
*Blood Glucose
*Catecholamines: PD, pharmacology

Chemistry

- *Dopamine: PD, pharmacology
- *Hyperglycemia: ET, etiology
- *Isoproterenol: PD, pharmacology
- *Norepinephrine: PD, pharmacology
- *Phenethylamines: PD, pharmacology

Rabbits

RN 51-41-2 (Norepinephrine); 51-61-6 (Dopamine); 7683-59-2 (Isoproterenol)
CN 0 (Acetophenones); 0 (Blood Glucose); 0 (Catecholamines); 0
(Phenethylamines)

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ACCESSION NUMBER: 92359400 EMBASE

DOCUMENT NUMBER: 1992359400

TITLE: Decreases in albumin/creatinine and N-acetylglucosaminidase/creatinine ratios in urine samples stored at -20 °C.

AUTHOR: Manley S.E.; Burton M.E.; Fisher K.E.; Cull C.A.; Turner R.C.

CORPORATE SOURCE: Diabetes Research Laboratories, Radcliffe Infirmary, Woodstock Road, Oxford OX2 6HE, United Kingdom

SOURCE: Clinical Chemistry, (1992) Vol. 38, No. 11, pp. 2294-2299.

ISSN: 0009-9147 CODEN: CLCHAU

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 003 Endocrinology
028 Urology and Nephrology
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 27 Dec 1992
Last Updated on STN: 27 Dec 1992

ED Entered STN: 27 Dec 1992

Last Updated on STN: 27 Dec 1992

AB The effects of storage for 6 months or 2 years at -20 °C were studied in urine samples from Type II diabetic patients by assaying albumin by immunoturbidity, N-acetylglucosaminidase (EC 3.2.1.30) by methoxynitrovinylphenol release, and creatinine by the Jaffe method. There were significant decreases ($P < 0.001$) in albumin/creatinine ratios from 1.14 (0.63-2.98) to 0.83 (0.32-2.12) g/mol (median + interquartile ranges) after 6 months ($n = 97$), and from 1.64 (0.74-5.72) to 1.00 (0.37-4.54) g/mol after 2 years ($n = 89$). The percentage of samples with results below the detection limit of the albumin assay (2 mg/L) increased from 5% to 21% after 6 months and from 0% to 34% after 2 years. N-Acetylglucosaminidase/creatinine ratios decreased ($P < 0.001$) from 520 (358-832) to 380 (263-695) U/mol after 6 months and from 520 (330-865) to 258 (82-462) U/mol after 2 years. The effect of storage was greater in samples with concentrations in the normal range (<2.5 g/mol for albumin/creatinine, <500 U/mol for N-acetylglucosaminidase/creatinine). Samples with albumin concentrations more than twice the normal range were still detected as abnormal after storage at -20 °C; e.g., 18% were >5 g/mol (albumin/creatinine) initially, with 17% >5 g/mol after 6 months of storage. We therefore recommend storage of urine samples at 4 °C for no longer than 7 days before assay.

CT Medical Descriptors:

*diabetes mellitus: DI, diagnosis

*microalbuminuria

*storage

*urinalysis

analytical error

article

data analysis

enzyme activity

human

kidney function

low temperature

priority journal

protein determination

protein urine level

quantitative assay

time

turbidity

Drug Descriptors:

*albumin

creatinine

glucosaminidase

RN (creatinine) 19230-81-0, 60-27-5

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ACCESSION NUMBER: 2001184882 EMBASE

TITLE: Synthesis of flavonoids and their effects on aldose reductase and sorbitol accumulation in streptozotocin-induced diabetic rat tissues.

AUTHOR: Lim S.S.; Jung S.H.; Ji J.; Shin K.H.; Keum S.R.

CORPORATE SOURCE: K.H. Shin, Natural Products Research Institute, Seoul National University, (110-460) 28 Yeungun-dong, Jongro-gu, Seoul, Korea, Republic of. khshin@plaza.snu.ac.kr

SOURCE: Journal of Pharmacy and Pharmacology, (2001) Vol. 53, No. 5, pp. 653-668. .

Refs: 41

ISSN: 0022-3573 CODEN: JPPMAB

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 003 Endocrinology
037 Drug Literature Index
030 Pharmacology
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 7 Jun 2001
Last Updated on STN: 7 Jun 2001

ED Entered STN: 7 Jun 2001

Last Updated on STN: 7 Jun 2001

AB Aldose reductase, the key enzyme of the polyol pathway, and oxidative stress are known to play important roles in the complications of diabetes. A drug with potent inhibition of aldose reductase and oxidative stress, therefore, would be a most promising drug for the prevention of diabetic complications. The purpose of this study was to develop new compounds with these dual-effects through synthesis of chalcone derivatives and by examining the structure-activity relationships

on the inhibition of rat lens aldose reductase as well as on antioxidant effects. A series of 35 flavonoid derivatives were synthesized by Winget's condensation, oxidation, and reduction of appropriate acetophenones with appropriate benzaldehydes. The inhibitory activity of these derivatives on rat lens aldose reductase and their antioxidant effects, measured using Cu(2+) chelation and radical scavenging activities on 1,1-diphenyl-picrylhydrazyl in-vitro, were evaluated. Their effect on sorbitol accumulation in the red blood cells, lenses and sciatic nerves of streptozotocin-induced diabetic rats was also estimated. Among the new flavonoid derivatives synthesized, those with the 2',4'-dihydroxyl groups in the A ring such as 2,4,2',4'-tetrahydroxychalcone (22), 2,2',4'-trihydroxychalcone (11), 2',4'-dihydroxy-2,4-dimethylchalcone (21) and 3,4,2',4'-tetrahydroxychalcone (18) were found to possess the highest rat lens aldose reductase inhibitory activity in-vitro, their IC₅₀ values (concentration of inhibitors giving 50 % inhibition of enzyme activity) being $1.6 \times 10(-7)$, $3.8 \times 10(-7)$, $4.0 \times 10(-7)$ and $4.6 \times 10(-7)$ M, respectively. All of the chalcones tested except 3, 18, 23 with o-dihydroxy or hydroquinone moiety showed a weak free radical scavenging activity. In the in-vivo experiments, however, compound 18 with o-dihydroxy moiety in the B ring showed the strongest inhibitory activity in the accumulation of sorbitol in the tissues. It also showed the strongest activity in transition metal chelation and free radical scavenging activity. Of the 35 4,2'-dihydroxyl and 2',4'-dihydroxyl derivatives of flavonoid synthesized, including chalcone, flavone, flavanone, flavonol and dihydrochalcone, some chalcone derivatives synthesized were found to possess aldose reductase inhibition and antioxidant activities in-vitro as well as inhibition in the accumulation of sorbitol in the tissues in-vivo. 3,4,2',4'-Tetrahydroxychalcone (18, butein) was the most promising compound for the prevention or treatment of diabetic complications.

CT

Medical Descriptors:

*streptozocin diabetes: DT, drug therapy
*drug synthesis
controlled study
nonhuman
rat
animal tissue
animal experiment
animal model
oxidative stress
drug inhibition
drug effect
structure activity relation
antioxidant activity
oxidation
reduction
lens
chelation
erythrocyte
sciatic nerve
enzyme activity
structure analysis
in vivo study
in vitro study
tissue level
diabetes control
article

Drug Descriptors:

*flavonoid: DV, drug development
*flavonoid: PD, pharmacology
*flavonoid: AN, drug analysis
*flavonoid: DT, drug therapy
*aldehyde reductase: EC, endogenous compound
*sorbitol: EC, endogenous compound
streptozocin
chalcone derivative: DV, drug development
chalcone derivative: PD, pharmacology
chalcone derivative: AN, drug analysis
chalcone derivative: DT, drug therapy
acetophenone derivative
benzaldehyde derivative
copper
scavenger
1,1 diphenyl 2 picrylhydrazyl
2,4,2',4' tetrahydroxychalcone: DV, drug development
2,4,2',4' tetrahydroxychalcone: PD, pharmacology
2,4,2',4' tetrahydroxychalcone: AN, drug analysis
2,4,2',4' tetrahydroxychalcone: DT, drug therapy
2,2',4' trihydroxychalcone: DV, drug development
2,2',4' trihydroxychalcone: PD, pharmacology
2,2',4' trihydroxychalcone: AN, drug analysis
2,2',4' trihydroxychalcone: DT, drug therapy
2',4' dihydroxy 2,4 dimethylchalcone: DV, drug development
2',4' dihydroxy 2,4 dimethylchalcone: PD, pharmacology
2',4' dihydroxy 2,4 dimethylchalcone: AN, drug analysis
2',4' dihydroxy 2,4 dimethylchalcone: DT, drug therapy
butein: DV, drug development
butein: PD, pharmacology
butein: AN, drug analysis
butein: DT, drug therapy
flavone derivative: DV, drug development
flavone derivative: PD, pharmacology
flavone derivative: AN, drug analysis
flavone derivative: DT, drug therapy
flavanone derivative: DV, drug development
flavanone derivative: PD, pharmacology
flavanone derivative: AN, drug analysis
flavanone derivative: DT, drug therapy
flavonol derivative: DV, drug development
flavonol derivative: PD, pharmacology
flavonol derivative: AN, drug analysis
flavonol derivative: DT, drug therapy
unclassified drug
RN (aldehyde reductase) 58591-34-7, 9023-11-4, 9028-31-3; (sorbitol)
26566-34-7, 50-70-4, 53469-19-5; (streptozocin) 18883-66-4; (copper)
15158-11-9, 7440-50-8; (1,1 diphenyl 2 picrylhydrazyl) 1898-66-4; (butein)
21849-70-7, 487-52-5

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ACCESSION NUMBER: 95315896 EMBASE

DOCUMENT NUMBER: 1995315896

TITLE: Synthesis of possible hypoglycemic compounds part
- V: Synthesis of N-(acetophenone)-3-(N-hydroxy

alkyl/aryl-methyl-amido)-pyridinium iodides.

AUTHOR: Jindal S.; Shukla A.; Pandey V.K.
CORPORATE SOURCE: Department of Chemistry, University of Lucknow, Lucknow, India

SOURCE: Indian Drugs, (1995) Vol. 32, No. 7, pp. 317-319.
ISSN: 0019-462X CODEN: INDRBA

COUNTRY: India

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 14 Nov 1995

Last Updated on STN: 14 Nov 1995

ED Entered STN: 14 Nov 1995

Last Updated on STN: 14 Nov 1995

AB The antidiabetic activity of pyridine derivatives has been reported by many schools of research. The compounds decreased blood glucose levels by stimulating glucose primed insulin release through antagonising at α_2 -adrenoreceptors on the β -cells. These observations prompted the authors to prepare some new derivatives of pyridinium iodides with the anticipation that such compounds might act more promptly in the body system. The intermediate N-hydroxy-alkyl/aryl-methyl nicotinamide (I) were synthesised by refluxing nicotinamide and aliphatic/aromatic aldehyde in ethanol. Finally the reaction between different N-hydroxy alkyl/aryl-methyl nicotinamide, acetophenone and iodine was done in CCl₄ to furnish N-(acetophenone)-3-(N-hydroxyalkyl/aryl-methyl amido)-pyridinium iodides (II), the title compounds.

CT Medical Descriptors:

*synthesis

article

chemical reaction

chemical structure

Drug Descriptors:

*antidiabetic agent

*pyridine derivative: DV, drug development

*pyridinium derivative

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ACCESSION NUMBER: 95242913 EMBASE

DOCUMENT NUMBER: 1995242913

TITLE: Inhibition of pyruvate dehydrogenase kinase by halogenated acetophenones.

AUTHOR: Espinal O.; Leesnitzer T.; Hassman A.; Beggs M.; Cobb J.

CORPORATE SOURCE: Institut de Recherches Servier, 11, rue des Moulineaux, 92150 Suresnes, France

SOURCE: Drug Development Research, (1995) Vol. 35, No. 3, pp. 130-136.

ISSN: 0272-4391 CODEN: DDREDK

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 12 Sep 1995

Last Updated on STN: 12 Sep 1995

ED Entered STN: 12 Sep 1995

Last Updated on STN: 12 Sep 1995

AB The activity of pyruvate dehydrogenase (PDH), and hence of glucose oxidation, is regulated by reversible phosphorylation. We have searched for novel PDH-Kinase inhibitors using a high-throughput microtiter plate assay. A series of halogenated acetophenones with potent activity against PDH-Kinase ($IC_{50} = 1\text{-}3 \mu\text{M}$) and inactive towards other protein kinases was identified. The lead compound displayed non-linear kinetics and was shown to be an uncompetitive inhibitor with respect to ATP. These novel inhibitors of PDH-Kinase may be potential new drug leads for the treatment of **diabetes** or ischaemic conditions.

CT Medical Descriptors:

- *enzyme inhibition
- article
- cow
- drug screening
- heart
- structure activity relation

Drug Descriptors:

- *acetophenone derivative: AN, drug analysis**
- *acetophenone derivative: DV, drug development**
- *acetophenone derivative: CM, drug comparison**
- *acetophenone derivative: PD, pharmacology**
- *enzyme inhibitor: CM, drug comparison
- *enzyme inhibitor: PD, pharmacology
- *enzyme inhibitor: DV, drug development
- *enzyme inhibitor: AN, drug analysis
- *pyruvate dehydrogenase: EC, endogenous compound
- *pyruvate kinase: EC, endogenous compound
- 2,2 dichloro 4' methylacetophenone: CM, drug comparison
- 2,2 dichloro 4' methylacetophenone: DV, drug development
- 2,2 dichloro 4' methylacetophenone: AN, drug analysis
- unclassified drug

RN (pyruvate dehydrogenase) 9014-20-4; (pyruvate kinase) 9001-59-6

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ACCESSION NUMBER: 90343471 EMBASE

DOCUMENT NUMBER: 1990343471

TITLE: Synthesis of possible hypoglycemic agents;
I.Synthesis of m-(arylamido/imido-aralkyl) phenyl sulphonamido-p-acetophenone thiosemicarbazones.

AUTHOR: Pandey V.K.; Jindal S.

CORPORATE SOURCE: Department of Chemistry, University of Lucknow,
Lucknow-226007, India

SOURCE: Indian Drugs, (1990) Vol. 27, No. 10, pp. 509-512.
ISSN: 0019-462X CODEN: INDRBA

COUNTRY: India

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 030 Pharmacology
037 Drug Literature Index

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Dec 1991
Last Updated on STN: 13 Dec 1991

ED Entered STN: 13 Dec 1991
Last Updated on STN: 13 Dec 1991

CT Medical Descriptors:

- *drug screening
- *drug synthesis
- *glucose blood level
- infrared spectrophotometry
- nuclear magnetic resonance
- rat
- animal experiment
- nonhuman
- oral drug administration
- article

Drug Descriptors:

- 4 (phenylsulfonylamino)acetophenone thiosemicarbazone derivative: CM, drug comparison
- 4 (phenylsulfonylamino)acetophenone thiosemicarbazone derivative: AN, drug analysis
- 4 (phenylsulfonylamino)acetophenone thiosemicarbazone derivative: DV, drug development
- unclassified drug

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ACCESSION NUMBER: 78195672 EMBASE

DOCUMENT NUMBER: 1978195672

TITLE: Amphibian pancreas function in long-term organ culture.
Control of amylase release.

AUTHOR: Gater S.; Balls M.

CORPORATE SOURCE: Dept. Hum. Morphol., Univ. Nottingham Med. Sch.,
Nottingham, United Kingdom

SOURCE: General and Comparative Endocrinology, (1977) Vol. 33, No.
1, pp. 82-93.

CODEN: GCENA5

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index
003 Endocrinology
030 Pharmacology
029 Clinical Biochemistry

LANGUAGE: English

AB Fragments of pancreas from the adult urodele amphibian *Amphiuma means* (the Congo eel) were maintained in organ culture for up to 28 days. Both amylase synthesis and release into the culture medium were stimulated by pancreozymin. Amylase release was also stimulated by the addition to the medium of dibutyryl-cAMP, acetylcholine, methacholine, glucagon, isoprenaline, calcium, and an ionophore. The pancreozymin effect was inhibited by dinitrophenol, that of acetylcholine by atropine. Added glucose, insulin, and a protease inhibitor did not affect medium amylase levels. The results are discussed in terms of long-term adult vertebrate pancreas organ culture and the comparative control of amylase release by the exocrine pancreas.

CT Medical Descriptors:

- *cell culture
- *isolated organ
- *microscopy
- *organ culture
- *pancreas
- *ultrastructure

in vitro study
 histology
 electron microscopy
 Drug Descriptors:
 *2,4 dinitrophenol
 *acetylcholine
 *amylase
 *aprotinin
 *atropine
 *calcium
 *calcium chloride
 *bucladesine
 *enzyme
 *glucagon
 *glucose
 *insulin
 *lasalocid
 *isoprenaline
 *methacholine chloride
 *cholecystokinin
 *propranolol
 *theophylline
 radioisotope
 ro 20 0006/006
 unclassified drug

RN (2,4 dinitrophenol) 25550-58-7, 51-28-5; (acetylcholine) 51-84-3, 60-31-1,
 66-23-9; (amylase) 9000-90-2, 9000-92-4, 9001-19-8; (aprotinin)
 11004-21-0, 12407-79-3, 50936-63-5, 52229-70-6, 58591-29-0, 9050-74-2,
 9075-10-9, 9087-70-1; (atropine) 51-55-8, 55-48-1; (calcium) 7440-70-2;
 (calcium chloride) 10043-52-4; (bucladesine) 16980-89-5, 362-74-3;
 (glucagon) 11140-85-5, 62340-29-8, 9007-92-5; (glucose) 50-99-7,
 84778-64-3; (insulin) 9004-10-8; (lasalocid) 11054-70-9, 25999-20-6,
 25999-31-9; (isoprenaline) 299-95-6, 51-30-9, 6700-39-6, 7683-59-2;
 (methacholine chloride) 62-51-1; (cholecystokinin) 9011-97-6, 93443-27-7;
 (propranolol) 13013-17-7, 318-98-9, 3506-09-0, 4199-09-1, 525-66-6;
 (theophylline) 58-55-9, 5967-84-0, 8055-07-0, 8061-56-1, 99007-19-9

CN Ro 20 0006/006

CO Sigma; Roche (United Kingdom); Weddell; Macarthys; Pharmax; Lilly; Boots;
Ici

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STN DUPLICATE 13

ACCESSION NUMBER: 1991:368537 BIOSIS
 DOCUMENT NUMBER: PREV199192056762; BA92:56762
 TITLE: ISOXAZOLE ANALOGUES OF ISOFLAVONES.
 AUTHOR(S): GORBULENKO N V [Reprint author]; KHILYA V P; KIRPA S A
 CORPORATE SOURCE: KIEV STATE UNIV, KIEV, USSR
 SOURCE: Doklady Akademii Nauk Ukrainskoi SSR Seriya B
 Geologicheskie Khimicheskie i Biologicheskie Nauki, (1990) No. 12, pp. 22-26.
 CODEN: DNNADO. ISSN: 0201-8454.
 DOCUMENT TYPE: Article
 FILE SEGMENT: BA
 LANGUAGE: RUSSIAN
 ENTRY DATE: Entered STN: 13 Aug 1991
 Last Updated on STN: 8 Oct 1991
 ED Entered STN: 13 Aug 1991

Last Updated on STN: 8 Oct 1991

- AB Condensation of 3-cyanomethylisoxazole with resorcinol and its alkyl derivatives gave α -(3-isoxazolyl)-2-hydroxyacetophenones, which were converted to 3-(3-isoxazolyl)-7-hydroxychromones having the structure analogous to that of natural isoflavones using the method of Venkataraman. Preliminary pharmacological examination has shown that some of the synthesized isoxazolylchromones possess hypolipidemic, anabolic and hypoglycemic activities.
- CC Biochemistry studies - General 10060
Biochemistry studies - Lipids 10066
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Biophysics - Molecular properties and macromolecules 10506
Metabolism - Carbohydrates 13004
Metabolism - Lipids 13006
Metabolism - Metabolic disorders 13020
Pharmacology - General 22002
Toxicology - Pharmacology 22504
- IT Major Concepts
Biochemistry and Molecular Biophysics; Metabolism; Pharmacology;
Toxicology
- IT Miscellaneous Descriptors
3 CYANOMETHYLISOXAZOLE RESORCINOL ALPHA-3 ISOXAZOLYL-2-HYDROXYACETOPHENONE 3-3 ISOXAZOLYL-7-HYDROXYCHROMONE
PHARMACOLOGY HYPOLIPIDEMIA ANABOLISM HYPOGLYCEMIA
- RN 55242-83-6 (3-CYANOMETHYLISOXAZOLE)
108-46-3 (RESORCINOL)

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STN DUPLICATE 15

ACCESSION NUMBER: 1982:261888 BIOSIS
DOCUMENT NUMBER: PREV198274034368; BA74:34368
TITLE: EXCRETION OF URINARY VOLATILE METABOLITES IN RESPONSE TO ALLOXAN INDUCED DIABETES OF SHORT DURATION IN RATS.
AUTHOR(S): RHODES G [Reprint author]; HOLLAND M L; WIESLER D; NOVOTNY M
CORPORATE SOURCE: UNIV VIRGINIA, CHEMISTRY DEP, CHARLOTEEVILLE, VA 22901,
USA
SOURCE: Journal of Chromatography Biomedical Applications, (1982) Vol. 228, pp. 33-42.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Alterations in urine volatile metabolites due to the induction of alloxan diabetes in the rat were examined by capillary gas chromatography and gas chromatography-mass spectrometry for the 5 days immediately following the onset of chronic hyperglycemia. Elevations of a number of metabolites were observed including several short chain ketones, acetophenone, 2-acetyl furan and indole. The value of urine volatile metabolic profiles as characteristic indicators of the diabetic condition is demonstrated through profiles obtained from a diabetic animal which spontaneously reverted to normal.

CC Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Movement 12100

Metabolism - General metabolism and metabolic pathways 13002
 Metabolism - Carbohydrates 13004
 Metabolism - Metabolic disorders 13020
 Blood - Blood and lymph studies 15002
 Urinary system - Physiology and biochemistry 15504
 Endocrine - Pancreas 17008
 Pharmacology - Drug metabolism and metabolic stimulators 22003
 Pharmacology - Endocrine system 22016
 Toxicology - General and methods 22501

IT Major Concepts
 Endocrine System (Chemical Coordination and Homeostasis); Metabolism;
 Pharmacology; Urinary System (Chemical Coordination and Homeostasis)

IT Miscellaneous Descriptors

DIABETOGEN SHORT CHAIN KETONE ACETOPHENONE 2 ACETYL
 FURAN INDOLE

ORGN Classifier

Muridae 86375

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,
 Rodents, Vertebrates

RN 50-71-5 (ALLOXAN)

98-86-2 (ACETOPHENONE)

1192-62-7 (2-ACETYLFURAN)

120-72-9 (INDOLE)

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 STN DUPLICATE 16

ACCESSION NUMBER: 1982:181414 BIOSIS

DOCUMENT NUMBER: PREV198273041398; BA73:41398

TITLE: ORAL ABSORPTION OF DRUGS BY THE ALLOXAN DIABETIC RAT.

AUTHOR(S): DAJANI R M [Reprint author]; ACRA A

CORPORATE SOURCE: DEP ENVIRON HEALTH, DIV PUBLIC HEALTH, FAC HEALTH SCI, AM
 UNIV BEIRUT, BEIRUT, LEBANON

SOURCE: General Pharmacology, (1981) Vol. 12, No. 5, pp.
 339-344.

CODEN: GEPHDP. ISSN: 0306-3623.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: ENGLISH

AB Studies on the intestinal absorption of 6 drugs [acetophenetidin, aminopyrine, cyclamate, ascorbic acid, phenylbutazone and N-acetyl-P-aminophenol] having varied chemical structure were investigated in normal and alloxan-diabetic rats. All diabetic animals exhibited lower absorption than the controls, with severe diabetics showing the most depression. No substantial change in oral drug absorption was effected by insulin treatment for 3 mo. No pattern was observed that would relate absorption of the test drugs to their chemical structure. The diminished absorption in the alloxan-diabetic rat is believed to be due mainly to irreversible constitutional and/or structural aberrations in the mucosal surface.

CC Comparative biochemistry 10010

Biochemistry studies - General 10060

Biochemistry studies - Nucleic acids, purines and pyrimidines 10062

Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Carbohydrates 10068

Metabolism - Carbohydrates 13004
 Metabolism - Metabolic disorders 13020
 Digestive system - Pathology 14006
 Endocrine - Pancreas 17008
 Dental biology - General and methods 19001
 Pharmacology - Drug metabolism and metabolic stimulators 22003
 Pharmacology - Digestive system 22014
 Pharmacology - Endocrine system 22016
 Routes of immunization, infection and therapy 22100
 Toxicology - General and methods 22501

IT Major Concepts
 Digestive System (Ingestion and Assimilation); Endocrine System
 (Chemical Coordination and Homeostasis); Metabolism; Pharmacology

IT Miscellaneous Descriptors
ACETOPHENETIDIN AMINOPYRINE CYCLAMATE ASCORBIC-ACID PHENYL
 BUTAZONE N ACETYL-P-AMINO PHENOL METABOLIC-DRUG DIABETOGEN
 INSULIN HORMONE-DRUG PHARMACO KINETICS MUCOSAL SURFACE ABERRATION

ORGN Classifier

Muridae 86375

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals,
 Rodents, Vertebrates

RN 50-71-5 (ALLOXAN)

62-44-2 (ACETOPHENETIDIN)

58-15-1 (AMINOPYRINE)

100-88-9 (CYCLAMATE)

50-81-7Q (ASCORBIC-ACID)

62624-30-0Q (ASCORBIC-ACID)

50-33-9 (PHENYLBUTAZONE)

103-90-2 (N-ACETYL-P-AMINOPHENOL)

9004-10-8 (INSULIN)

L130 ANSWER 88 OF 101 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
 STN DUPLICATE 19

ACCESSION NUMBER: 1973:238310 BIOSIS

DOCUMENT NUMBER: PREV197356068275; BA56:68275

TITLE: THE BIO TRANSFORMATION OF ACETOPHENETIDIN IN THE
 ALLOXAN DIABETIC RABBIT.

AUTHOR(S): DAJANI R M; KAYYALI S Y

SOURCE: Comparative and General Pharmacology, (1973) Vol.
 4, No. 13, pp. 23-35.
 CODEN: CPGPAY. ISSN: 0010-4035.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: Unavailable

CC Cytology - Animal 02506

Biochemistry studies - General 10060

Biochemistry studies - Nucleic acids, purines and pyrimidines 10062

Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Carbohydrates 10068

Enzymes - General and comparative studies: coenzymes 10802

Enzymes - Physiological studies 10808

Chordate body regions - Abdomen 11314

Metabolism - General metabolism and metabolic pathways 13002

Metabolism - Carbohydrates 13004

Metabolism - Metabolic disorders 13020
 Blood - Blood and lymph studies 15002
 Urinary system - Physiology and biochemistry 15504
 Endocrine - Pancreas 17008
 Dental biology - General and methods 19001
 Pharmacology - Drug metabolism and metabolic stimulators 22003
 Pharmacology - Endocrine system 22016
 Routes of immunization, infection and therapy 22100
 Toxicology - General and methods 22501

IT Major Concepts
 Endocrine System (Chemical Coordination and Homeostasis); Metabolism;
 Pharmacology

ORGN Classifier
 Leporidae 86040
 Super Taxa
 Lagomorpha; Mammalia; Vertebrata; Chordata; Animalia
 Taxa Notes
 Animals, Chordates, Lagomorphs, Mammals, Nonhuman Vertebrates, Nonhuman
 Mammals, Vertebrates
 RN 62-44-2 (ACETOPHENETIDIN)
 50-71-5 (ALLOXAN)

L130 ANSWER 89 OF 101 JAPIO (C) 2006 JPO on STN

ACCESSION NUMBER: 1999-092452 JAPIO
 TITLE: PRODUCTION OF 4'-(2-PYRIDYL) ACETOPHENONE
 INVENTOR: NOGUCHI YASUO; SAITOU TOMONORI; FUJIMOTO KATSUHIKO;
 TAKEBAYASHI TOYONORI
 PATENT ASSIGNEE(S): SANKYO CO LTD
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 11092452	A	<u>19990406</u>	Heisei	C07D213-50

APPLICATION INFORMATION

STN FORMAT:	JP 1997-255259	<u>19970919</u>
ORIGINAL:	JP09255259	Heisei
PRIORITY APPLN. INFO.:	JP 1997-255259	<u>19970919</u>
SOURCE:	PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1999	

ED 20020515

AB PROBLEM TO BE SOLVED: To safely and easily produce the subject compound that is useful as a synthetic intermediate for antidiabetic agent by allowing an acetophenone derivative to react with a compound prepared in the reaction system in the presence of a palladium complex catalyst.

SOLUTION: (A) A compound of formula I (X is halogen, preferably Br or I) is allowed to react with (B) a compound of formula II (Y is a halogen, suitably Cl) prepared in the reaction system in the presence of (C) a palladium complex catalyst [suitably tetrakis(triphenylphosphine) palladium, palladium acetate/phosphine] to prepare (D) 4'-(2-pyridyl)acetophenone. In a preferred embodiment, the amount of the component B is 1.0-10.0 equivalents, the amount of the component C is 0.1-50 mol.% based on the component A. This preparative reaction is preferably carried out in a solvent and pyrrolidones, aromatic hydrocarbons and others are used as a solvent.

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IC ICM C07D213-50
 ICS B01J031-24
 ICA C07B061-00

L130 ANSWER 90 OF 101 JAPIO (C) 2006 JPO on STN
 ACCESSION NUMBER: 1990-218674 JAPIO
 TITLE: PRODUCTION OF 6-FLUORO-4-CHROMANONE-2-CARBOXYLIC ACID
 INVENTOR: KOIZUMI TOSHIO; SAITO YOSHINORI
 PATENT ASSIGNEE(S): NIPPON KAYAKU CO LTD
 PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 02218674	A	<u>19900831</u>	Heisei	C07D311-24

APPLICATION INFORMATION

STN FORMAT:	JP 1989-39294	<u>19890221</u>
ORIGINAL:	JP01039294	Heisei
PRIORITY APPLN. INFO.:	JP 1989-39294	<u>19890221</u>
SOURCE:	PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1990	

ED 20020328

AB PURPOSE: To obtain the subject compound useful as a synthetic raw material for pharmaceuticals in high selectivity and yield on an industrial scale at a low cost by a catalytic reduction process by using 6-fluorochromone-2-carboxylic acid as a raw material and carrying out the catalytic hydrogenation of the material in the presence of a metallic catalyst.

CONSTITUTION: The objective compound of formula III useful as a production raw material for 6-fluoro-2,3-dihydro-2',5'-dioxo-spiro(4H-1-benzopyran-4,4'-imidazolidine) 2-carboxylic acid derivative of formula II which is a remedy for complication of diabetes can be produced by condensing 5-fluoro-2-hydroxyacetophenone and an oxalic acid diester in the presence of a base, cyclizing the reaction product with an acid and subjecting the resultant 6-fluorochromone-2-carboxylic acid of formula I to catalytic reduction reaction in a solvent (e.g. ethanol) in the presence of a metallic catalyst (e.g. Pt/C or Pd/Al<SB>2</SB>O<SB>3</SB>) at 0-100°C under H<SB>2</SB>-pressure of 0.1-20atm. The recovered catalyst can be reused.

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IC ICM C07D311-24

L130 ANSWER 91 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1982-23695 A E

TITLE: EXCRETION OF URINARY VOLATILE METABOLITES IN RESPONSE TO ALLOXAN INDUCED DIABETES OF SHORT DURATION IN RATS.

AUTHOR: RHODES G
 LOCATION: BLOOMINGTON AND INDIANAPOLIS, IND., USA.

SOURCE: J.CHRONATOG. (228, 33-42, 1982)

LANGUAGE: English

AN 1982-23695 DRUGB A E

FS R-X 1976-1982

SH A Analysis
 E EndocrinologyCC 5 Analysis
 12 AntidiabeticsIT DIFF. KETONE CF. ARYLKETONE ACETOPHENONE 2-ACETYLFURAN INDOLE

AS VOLATILE METABOLITE QUANT.DET. BY GASCHROMATOGRAPHY IN URINE ALLOXAN
DIABETES RAT PANCREOPATHY

MPC [01] 02& *G; 025 *G; 03& *G; 032 *G; 11- *G; 111 *G; 116 *G; 23- *G; 230 *G; 231 *G; 237 *G; 35& *B; 370 *B; 44- *B; 455 *B; 58- *B; 65& *B; 658 *B; 66& *B; 662 *B; 672 *B; 686 *B; 690 *B; 709 *B; 731 *B;
 [02] 02- *G; 025 *G; 031 *G; 032 *G; 067 *G; 071 *G; 080 *G; 100 *G; 163 *G; 35& *B; 370 *B; 44- *B; 455 *B; 58- *B; 65& *B; 658 *B; 66& *B; 662 *B; 672 *B; 686 *B; 690 *B; 709 *B; 731 *B;
 [03] 025 *G; 029 *G; 11& *G; 11- *G; 112 *G; 115 *G; 116 *G; 117 *G; 118 *G; 120 *G; 14- *G; 153 *G; 154 *G; 23- *G; 230 *G; 231 *G; 237 *G; 35& *B; 370 *B; 44- *B; 455 *B; 58- *B; 65& *B; 658 *B; 66& *B; 662 *B; 672 *B; 686 *B; 690 *B; 709 *B; 731 *B;
 [04] 02& *G; 025 *G; 06& *G; 067 *G; 071 *G; 075 *G; 10- *G; 102 *G; 103 *G; 104 *G; 11- *G; 115 *G; 124 *G; 134 *G; 14- *G; 153 *G; 17- *G; 178 *G; 18- *G; 183 *G; 187 *G; 23- *G; 230 *G; 231 *G; 235 *G; 237 *G; 26- *G; 265 *G; 35& *B; 370 *B; 44- *B; 455 *B; 58- *B; 65& *B; 658 *B; 66& *B; 662 *B; 672 *B; 686 *B; 690 *B; 709 *B; 731 *B;

L130 ANSWER 92 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1981-44432 P
 TITLE: POTASSIUM-INDUCED RELEASE OF /³H/CATECHOLAMINE FROM BRAIN.
 EFFECTS OF PRE-EXPOSURE TO CATECHOLAMINE UPTAKE INHIBITORS.
 AUTHOR: DEMBIEC D; COHEN G
 LOCATION: NEW YORK, N.Y., USA.
 SOURCE: J. PHARMACOL. EXP. THER. (217, NO. 3, 727-32, 1981)
 LANGUAGE: English
 AN 1981-44432 DRUGB P
 FS R-X 1976-1982
 SH P Pharmacology
 CC 26 Neurology
 32 Psychotropic
 IT COCAINE REGIS PSYCHOSTIMULANT ANTIDEPRESSANT NOMIFENSINE HOECHST MAZINDOL
 SANDOZ ANTIOBESITY 3&, 4&-DICHLOORO-2- 2-IMIDAZOLIN-2-YLTHIO
ACETOPHENONE DOW-CHEMICAL DIBENZAZEPINE DESIPRAMINE U.S.VITAMIN
 INFLUENCE ON POTASSIUM INDUCED TRITIUM LABELED DOPAMINE NORADRENALINE
 RELEASE BRAIN CORPUS-STRIATUM OCCIPITAL-CORTEX IN-VITRO RAT
 LOCAL-ANESTHETIC LOCAL-ANESTHETICS PSYCHOSTIMULANTS ANORECTIC ANORECTICS
 SYMPATHOMIMETIC SYMPATHOMIMETICS

[01] K
 MPC [01] 016 *C; 017 *C; 271 *C; 279 *C; 308 *B; 309 *B; 363 *B; 370 *B; 443 *B; 444 *B; 455 *B; 54- *B; 543 *B; 556 *B; 57& *B; 571 *B; 58& *B; 58- *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [02] 02& *G; 02- *G; 020 *G; 03& *G; 032 *G; 052 *G; 06- *G; 060 *G; 065 *G; 071 *G; 08- *G; 080 *G; 10- *G; 100 *G; 102 *G; 108 *G; 12& *G; 122 *G; 23& *G; 23- *G; 234 *G; 237 *G; 306 *G; 308 *B; 363 *B; 370 *B; 443 *B; 444 *B; 54- *B; 540 *B; 556 *B; 571 *B; 58& *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [03] 02& *G; 02- *G; 020 *G; 03& *G; 031 *G; 033 *G; 061 *G; 071 *G; 081 *G; 092 *G; 10- *G; 100 *G; 105 *G; 122 *G; 19- *G; 190 *G; 306 *G; 308 *B; 363 *B; 370 *B; 443 *B; 444 *B; 54- *B; 540 *B; 556 *B; 571 *B; 58& *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [04] 02& *G; 020 *G; 021 *G; 03& *G; 031 *G; 033 *G; 05- *G; 06- *G; 066 *G; 07- *G; 072 *G; 08- *G; 083 *G; 088 *G; 090 *G; 096 *G; 10- *G; 102 *G; 13& *G; 134 *G; 163 *G; 17- *G; 171 *G; 180 *G; 306 *G; 308 *B; 363 *B; 370 *B; 443 *B; 444 *B; 54- *B; 540 *B; 556 *B; 571 *B; 58& *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [05] 020 *G; 031 *G; 033 *G; 05- *G; 068 *G; 071 *G; 080 *G; 10- *G; 100

*G; 102 *G; 110 *G; 117 *G; 12& *G; 122 *G; 123 *G; 192 *G; 306 *G;
 303 *B; 363 *B; 370 *B; 443 *B; 444 *B; 54- *B; 556 *B; 571 *B; 58&
 *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [06] 02& *G; 02- *G; 03& *G; 032 *G; 06& *G; 066 *G; 07- *G; 072 *G; 083
 *G; 088 *G; 098 *G; 10- *G; 103 *G; 11- *G; 115 *G; 124 *G; 130 *G;
 133 *G; 17& *G; 17- *G; 171 *G; 18- *G; 184 *G; 187 *G; 23- *G; 231
 *G; 237 *G; 308 *B; 363 *B; 370 *B; 443 *B; 444 *B; 54- *B; 540 *B;
 556 *B; 571 *B; 58& *B; 602 *B; 607 *B; 73& *B; 731 *B;
 [07] 02& *G; 03& *G; 032 *G; 098 *G; 11- *G; 116 *G; 123 *G; 130 *G; 18-
 *G; 181 *G; 190 *G; 27& *G; 306 *G; 309 *B; 370 *B; 443 *B; 444 *B;
 455 *B; 520 *B; 543 *B; 556 *B; 57& *B; 58- *B; 602 *B; 607 *B; 73&
 *B; 731 *B;
 [08] 02& *G; 03& *G; 032 *G; 098 *G; 11- *G; 115 *G; 123 *G; 126 *G; 130
 *G; 131 *G; 134 *G; 18- *G; 182 *G; 190 *G; 27& *G; 306 *G; 309 *B;
 370 *B; 443 *B; 444 *B; 455 *B; 543 *B; 556 *B; 57& *B; 58- *B; 602
 *B; 607 *B; 73& *B; 731 *B;

L130 ANSWER 93 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1979-07571 P

TITLE: CIRCLING INDUCED BY DOPAMINE UPTAKE INHIBITORS.

AUTHOR: DUVOISIN R C; HEIKKILA R E; MANZINO L

LOCATION: NEW YORK, N.Y., USA.

SOURCE: J.PHARM.PHARMACOL. (30, NO.11, 714-16, 1978)

LANGUAGE: English

AN 1979-07571 DRUGB P

FS R-X 1976-1982

SH P Pharmacology

CC 26 Neurology

32 Psychotropic

IT PSYCHOSTIMULANT ISOINDOLE I.P. MAZINDOL ANTIOBESITY ARYLKETONE
3&,4&-DICHLORO-2- 2-IMIDAZOLIN-2-YLTHIO ACETOPHENONE

ISOQUINOLINE NOMIFENSINE CF. AMPHETAMINE INFLUENCE ON REFLEX BEHAVIOR
 ROTATION POT. ROLE DOPAMINE IN 6-HYDROXYDOPAMINE UNILATERAL NIGRAL
 LESIONED RAT PSYCHOSTIMULANTS ANORECTIC ANORECTICS SYMPATHOMIMETIC
 SYMPATHOMIMETICS

MPC [01] 02& *G; 026 *G; 03& *G; 032 *G; 110 *G; 115 *G; 126 *G; 190 *G; 306
 *G; 35& *B; 370 *B; 387 *B; 397 *B; 445 *B; 45- *B; 538 *B; 54- *B;
 569 *B; 571 *B; 581 *B; 587 *B; 595 *B; 601 *B; 607 *B; 65& *B; 658
 *B; 66- *B; 667 *B; 73& *B;
 [02] 02& *G; 03& *G; 032 *G; 099 *G; 11- *G; 116 *G; 123 *G; 130 *G; 18-
 *G; 182 *G; 190 *G; 306 *G; 35& *B; 370 *B; 445 *B; 45- *B; 54- *B;
 571 *B; 581 *B; 587 *B; 595 *B; 73& *B;
 [03] 02& *G; 02- *G; 020 *G; 03& *G; 031 *G; 033 *G; 061 *G; 071 *G; 081
 *G; 092 *G; 10- *G; 100 *G; 105 *G; 122 *G; 19- *G; 190 *G; 306 *G;
 35& *B; 370 *B; 387 *B; 397 *B; 445 *B; 45- *B; 521 *B; 54- *B; 569
 *B; 571 *B; 581 *B; 587 *B; 595 *B; 607 *B; 650 *B; 652 *B; 66- *B;
 664 *B; 73& *B;
 [04] 02& *G; 020 *G; 021 *G; 03& *G; 031 *G; 033 *G; 05- *G; 06- *G; 066
 *G; 07- *G; 072 *G; 08- *G; 083 *G; 088 *G; 090 *G; 096 *G; 10- *G;
 102 *G; 13& *G; 134 *G; 163 *G; 17- *G; 171 *G; 180 *G; 306 *G; 35&
 *B; 370 *B; 387 *B; 397 *B; 445 *B; 45- *B; 521 *B; 54- *B; 569 *B;
 571 *B; 581 *B; 587 *B; 595 *B; 607 *B; 650 *B; 652 *B; 66- *B; 664
 *B; 73& *B;
 [05] 02& *G; 02- *G; 03& *G; 032 *G; 06& *G; 066 *G; 07- *G; 072 *G; 083
 *G; 088 *G; 098 *G; 10- *G; 103 *G; 11- *G; 115 *G; 124 *G; 130 *G;
 133 *G; 17& *G; 17- *G; 171 *G; 18- *G; 184 *G; 187 *G; 23- *G; 231
 *G; 237 *G; 266 *G; 35& *B; 370 *B; 387 *B; 397 *B; 445 *B; 45- *B;

521 *B; 54- *B; 569 *B; 571 *B; 581 *B; 587 *B; 595 *B; 607 *B; 650
 *B; 652 *B; 66- *B; 664 *B; 73& *B;

L130 ANSWER 94 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1977-42525 P S
 TITLE: PRECLINICAL EVALUATION OF DITA /3&,4&-DICHLORO-2-/2-
 IMIDAZOLIN-2-YL- THIO/ACETOPHENONE HYDROBROMIDE/. A NEW
 ANOREXIGENIC AGENT.
 AUTHOR: ABDALLAH A H
 CORPORATE SOURCE: DOW-CHEMICAL
 LOCATION: MIDLAND, MICH., USA.
 SOURCE: TOXICOL.APPL.PHARMACOL. (41, NO.2, 329-35, 1977)
 AN 1977-42525 DRUGB P S
 FS R-X 1976-1982
 SH P Pharmacology
 S Adverse Effects
 CC 9 Cardiovascular
 26 Neurology
 32 Psychotropic
 34 Toxicology
 IT ANTIOBESITY ARYLKETONE I.P. I.V. P.O. 3&,4&-DICHLORO-2-
2-IMIDAZOLIN-2-YLTHIO ACETOPHENONE CF. DEXAMPHETAMINE
 AMFEPRAMONE PSYCHOSTIMULANT ACT. INFLUENCE ON LOCOMOTOR ACT.
 HEMODYNAMICS, EXP. BLOOD-PRESSURE SYMPATHOMIMETIC ACT. TOX. LD50 MOUSE RAT
 CAT DOG ANORECTIC ANORECTICS PSYCHOSTIMULANTS SYMPATHOMIMETICS
 MPC [01] 02& *G; 02- *G; 03& *G; 032 *G; 06& *G; 066 *G; 07- *G; 072 *G; 083
 *G; 088 *G; 098 *G; 10- *G; 103 *G; 11- *G; 115 *G; 124 *G; 130 *G;
 133 *G; 17& *G; 17- *G; 171 *G; 18- *G; 184 *G; 187 *G; 23- *G; 231
 *G; 237 *G; 266 *G; 308 *B; 317 *B; 35& *B; 364 *B; 37- *B; 370 *B;
 374 *B; 375 *B; 387 *B; 397 *B; 40- *B; 403 *B; 447 *B; 45& *B; 45-
 *B; 48- *B; 498 *B; 517 *B; 525 *B; 531 *B; 538 *B; 54- *B; 544 *B;
 563 *B; 568 *B; 569 *B; 57& *B; 571 *B; 58& *B; 582 *B; 586 *B; 589
 *B; 59- *B; 596 *B; 601 *B; 607 *B; 608 *B; 65- *B; 651 *B; 660 *B;
 663 *B; 665 *B; 73& *B; 73- *B; 747 *B;
 [02] 02& *G; 029 *G; 03& *G; 032 *G; 11& *G; 11- *G; 110 *G; 115 *G; 12&
 *G; 123 *G; 126 *G; 133 *G; 190 *G; 195 *G; 23- *G; 231 *G; 237 *G;
 266 *G; 306 *G; 308 *B; 317 *B; 35& *B; 364 *B; 37- *B; 370 *B; 374
 *B; 375 *B; 387 *B; 397 *B; 40- *B; 403 *B; 447 *B; 45& *B; 45- *B;
 48- *B; 498 *B; 517 *B; 525 *B; 531 *B; 538 *B; 54- *B; 544 *B; 563
 *B; 568 *B; 569 *B; 57& *B; 571 *B; 58& *B; 582 *B; 586 *B; 589 *B;
 59- *B; 596 *B; 601 *B; 607 *B; 608 *B; 65- *B; 651 *B; 660 *B; 663
 *B; 665 *B; 73& *B; 73- *B; 747 *B;
 [03] 02& *G; 03& *G; 032 *G; 098 *G; 11- *G; 115 *G; 123 *G; 126 *G; 130
 *G; 131 *G; 134 *G; 18- *G; 182 *G; 190 *G; 306 *G; 309 *B; 35& *B;
 374 *B; 375 *B; 40- *B; 403 *B; 45& *B; 45- *B; 496 *B; 498 *B; 517
 *B; 531 *B; 54- *B; 544 *B; 57& *B; 571 *B; 582 *B; 59- *B; 608 *B;
 73& *B;
 [04] 02& *G; 03& *G; 032 *G; 096 *G; 11- *G; 116 *G; 123 *G; 18- *G; 180
 *G; 190 *G; 306 *G; 309 *B; 35& *B; 374 *B; 375 *B; 40- *B; 403 *B;
 45& *B; 45- *B; 496 *B; 498 *B; 517 *B; 531 *B; 54- *B; 57& *B; 571
 *B; 582 *B; 589 *B; 59- *B; 608 *B; 73& *B;

L130 ANSWER 95 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1977-26501 P
 TITLE: EFFECT OF /3&,4&DICHLORO2 /2-IMIDAZOLIN-2-YL-THIO/-
 ACETOPHENONE HYDROBROMIDE/ /DITA/ ON PULMONARY AND SYSTEMIC
 ARTERIAL BLOOD PRESSURE. A COMPARISON WITH DIETHYLPROMION.

AUTHOR: ABDALLAH A H; ROBY D M
 CORPORATE SOURCE: DOWCHEMICAL
 LOCATION: MIDLAND, MICH., USA.
 SOURCE: J.PHARM.PHARMACOL. (29, NO.5, 31819, 1977)
 AN 1977-26501 DRUGB P
 FS R-X 1976-1982
 SH P Pharmacology
 CC 9 Cardiovascular
 26 Neurology
 IT ANTIOBESITY ARYLKETONE I.V. 3&,4&DICHLORO2 2IMIDAZOLIN2 YL-THIO
-ACETOPHENONE CF. AMFEPRAMONE MERRELL INFLUENCE ON
 HEMODYNAMICS, EXP. SYSTEMIC BLOODPRESSURE ANESTHETIZED DOG
ANORECTIC ANORECTICS
 MPC [01] 02& *G; 02 *G; 03& *G; 032 *G; 06& *G; 067 *G; 07 *G; 072 *G; 083
 *G; 088 *G; 098 *G; 10 *G; 103 *G; 11 *G; 115 *G; 124 *G; 130 *G;
 133 *G; 17& *G; 17 *G; 171 *G; 18 *G; 184 *G; 187 *G; 23 *G; 231
 *G; 237 *G; 318 *B; 35& *B; 364 *B; 375 *B; 421 *B; 517 *B; 54 *B;
 568 *B; 57& *B; 58& *B; 59 *B; 607 *B; 73& *B;
 [02] 02& *G; 03& *G; 032 *G; 11& *G; 11 *G; 110 *G; 115 *G; 12& *G; 123
 *G; 126 *G; 133 *G; 195 *G; 23 *G; 231 *G; 237 *G; 266 *G; 306 *G;
 318 *B; 35& *B; 364 *B; 375 *B; 421 *B; 517 *B; 54 *B; 568 *B; 57&
 *B; 58& *B; 59 *B; 607 *B; 73& *B;

L130 ANSWER 96 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1977-10826 P
 TITLE: ROLE OF DOPAMINE IN THE ANOREXIGENIC EFFECT OF DITA,
 COMPARISON WITH DAMPHETAMINE.
 AUTHOR: ABDALLAH A H; ROBY D M; BOECKLER W H; RILEY C C
 CORPORATE SOURCE: DOWCHEMICAL
 LOCATION: MIDLAND, MICH., USA.
 SOURCE: EUR.J.PHARMACOL. (40, NO.1, 3944, 1976)
 AN 1977-10826 DRUGB P
 FS R-X 1976-1982
 SH P Pharmacology
 CC 26 Neurology
 32 Psychotropic
 IT THIOUREA I.P. 3&,4&DICHLORO2 2-IMIDAZOLIN-2-YL- THIO ACETOPHENONE
 CF. DEXAMPETAMINE MANN ANTIOBESITY ACT. MODIFICATION BY
 METHYLTYROSINE REGIS HALOPERIDOL MCNEIL CF. METHYSERGIDE SANDOZ
 CYPROHEPTADINE MERCKUSA PHENOXYBENZAMINE SK&F PROPRANOLOL AYERST POT.ROLE
 OF DOPAMINE MOUSE ANORECTIC ANORECTICS PSYCHOSEDATIVE PSYCHOSEDATIVES
 SYMPATHOLYTIC SYMPATHOLYTICS HYPOTENSIVE HYPOTENSIVES ANTIARRHYTHMIC
 ANTIARRHYTHMICS
 MPC [01] 02& *G; 03& *G; 032 *G; 110 *G; 115 *G; 126 *G; 190 *G; 306 *G; 309
 *B; 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 48 *B; 54 *B; 569 *B;
 571 *B; 58& *B; 589 *B; 607 *B; 73& *B;
 [02] 02& *G; 02 *G; 03& *G; 032 *G; 06& *G; 067 *G; 07 *G; 072 *G; 083
 *G; 088 *G; 098 *G; 10 *G; 103 *G; 11 *G; 115 *G; 124 *G; 130 *G;
 133 *G; 17& *G; 17 *G; 171 *G; 18 *G; 184 *G; 187 *G; 23 *G; 231
 *G; 237 *G; 309 *B; 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 48 *B; 54
 *B; 569 *B; 571 *B; 58& *B; 589 *B; 607 *B; 73& *B;
 [03] 02& *G; 020 *G; 03& *G; 033 *G; 06& *G; 060 *G; 071 *G; 09& *G; 090
 *G; 096 *G; 10 *G; 100 *G; 102 *G; 105 *G; 111 *G; 117 *G; 123 *G;
 134 *G; 17 *G; 170 *G; 171 *G; 180 *G; 23 *G; 231 *G; 237 *G; 306
 *G; 308 *B; 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 54 *B; 569 *B;
 571 *B; 58& *B; 589 *B; 607 *B; 73& *B;
 [04] 021 *G; 030 *G; 031 *G; 032 *G; 040 *G; 046 *G; 05& *G; 05 *G; 051

*G; 061 *G; 067 *G; 072 *G; 08& *G; 080 *G; 10& *G; 10 *G; 100 *G;
 102 *G; 105 *G; 11& *G; 111 *G; 115 *G; 12& *G; 122 *G; 124 *G; 126
 *G; 131 *G; 163 *G; 164 *G; 180 *G; 235 *G; 237 *G; 26& *G; 26 *G;
 306 *G; 308 *B; 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 540 *B; 569
 *B; 571 *B; 58& *B; 589 *B; 607 *B; 73& *B;
 [05] 02& *G; 03& *G; 032 *G; 096 *G; 110 *G; 115 *G; 127 *G; 133 *G; 18
 *G; 180 *G; 190 *G; 232 *G; 237 *G; 306 *G; 308 *B; 35& *B; 363 *B;
 37 *B; 387 *B; 397 *B; 54 *B; 569 *B; 571 *B; 58& *B; 589 *B; 607 *B;
 73& *B;
 [06] 02& *G; 02 *G; 03& *G; 033 *G; 11& *G; 11 *G; 110 *G; 115 *G; 116
 *G; 12& *G; 123 *G; 124 *G; 125 *G; 126 *G; 13& *G; 131 *G; 134 *G;
 171 *G; 18 *G; 184 *G; 195 *G; 266 *G; 306 *G; 308 *B; 35& *B; 363
 *B; 37 *B; 387 *B; 397 *B; 540 *B; 569 *B; 571 *B; 58& *B; 589 *B;
 607 *B; 73& *B;
 [07] 02 *G; 03 *G; 033 *G; 092 *G; 11& *G; 110 *G; 115 *G; 12& *G; 123
 *G; 124 *G; 126 *G; 130 *G; 131 *G; 18 *G; 180 *G; 184 *G; 192 *G;
 306 *G; 308 *B; 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 540 *B; 569
 *B; 571 *B; 58& *B; 589 *B; 607 *B; 73& *B;
 [08] 02& *G; 020 *G; 021 *G; 030 *G; 033 *G; 05 *G; 054 *G; 06& *G; 060
 *G; 071 *G; 091 *G; 092 *G; 10 *G; 100 *G; 102 *G; 105 *G; 122 *G;
 14 *G; 156 *G; 16 *G; 161 *G; 162 *G; 163 *G; 164 *G; 306 *G; 308 *B;
 35& *B; 363 *B; 37 *B; 387 *B; 397 *B; 48 *B; 54 *B; 540 *B; 569
 *B; 571 *B; 58& *B; 607 *B; 73& *B;

L130 ANSWER 97 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1976-35329 P

TITLE: THE CARDIOVASCULAR ACTIVITY OF DITA /3&,4&-DICHLORO-2-/
 2-IMIDAZOLIN-2-YL-THIO/-ACETOPHENONE H BR/, A POTENTIAL
 APPETITE SUPPRESSANT AGENT.

AUTHOR: ABDALLAH A H

CORPORATE SOURCE: DOW-CHEMICAL

LOCATION: MIDLAND, MICH., USA.

SOURCE: PHARMACOLOGIST (18, NO.2, 188, 1976)

AN 1976-35329 DRUGB P

FS R-X 1976-1982

SH P Pharmacology

CC 9 Cardiovascular

26 Neurology

32 Psychotropic

IT ANTIOBESITY THIOUREA I.V. 3&,4&-DICHLORO-2-

2-IMIDAZOLIN-2-YL-THIO -ACETOPHENONE DIFF.DOSAGE INCL.

TACHYPHYLAXIS INFLUENCE ON HEMODYNAMICS, EXP. BLOOD-PRESSURE MODIFICATION

BY PHENOXYBENZAMINE RESERPINE CF. ATROPINE PRETREATMENT POT.MECHANISM

ANESTHETIZED DOG CAT CONGRESS ABSTRACT ANORECTIC ANORECTICS SYMPATHOLYTIC

SYMPATHOLYTICS HYPOTENSIVE HYPOTENSIVES SPASMOLYTIC SPASMOLYTICS

PARASYMPATHOLYTIC

MPC [01] 02& *G; 02- *G; 03& *G; 032 *G; 06& *G; 066 *G; 07- *G; 072 *G; 083
 *G; 088 *G; 099 *G; 10- *G; 103 *G; 11- *G; 130 *G; 18- *G; 184 *G;
 187 *G; 23- *G; 231 *G; 237 *G; 309 *B; 35& *B; 363 *B; 374 *B; 517
 *B; 540 *B; 544 *B; 57& *B; 58& *B; 59- *B; 73& *B;

[02] 02& *G; 022 *G; 023 *G; 03& *G; 031 *G; 033 *G; 040 *G; 041 *G; 05&
 *G; 050 *G; 06- *G; 060 *G; 061 *G; 067 *G; 072 *G; 08- *G; 080 *G;
 093 *G; 099 *G; 101 *G; 107 *G; 122 *G; 13& *G; 130 *G; 163 *G; 18&
 *G; 18- *G; 183 *G; 23& *G; 23- *G; 234 *G; 237 *G; 306 *G; 308 *B;
 35& *B; 363 *B; 374 *B; 532 *B; 54- *B; 544 *B; 57& *B; 58& *B; 59-
 *B; 73& *B;

[03] 02& *G; 02- *G; 03& *G; 033 *G; 11& *G; 11- *G; 110 *G; 115 *G; 116

*G; 12& *G; 123 *G; 124 *G; 125 *G; 126 *G; 13& *G; 131 *G; 134 *G;
171 *G; 18- *G; 184 *G; 195 *G; 266 *G; 306 *G; 308 *B; 35& *B; 363
*B; 374 *B; 532 *B; 54- *B; 544 *B; 57& *B; 58& *B; 59- *B; 73& *B;
[04] 02& *G; 02- *G; 03& *G; 032 *G; 06& *G; 066 *G; 07- *G; 072 *G; 083
*G; 088 *G; 099 *G; 10- *G; 103 *G; 11- *G; 130 *G; 17& *G; 17- *G;
171 *G; 18- *G; 184 *G; 187 *G; 23- *G; 231 *G; 237 *G; 309 *B; 35&
*B; 363 *B; 364 *B; 375 *B; 48- *B; 517 *B; 54- *B; 568 *B; 57& *B;
577 *B; 58& *B; 589 *B; 65- *B; 651 *B; 66& *B; 661 *B; 73& *B;
[05] 02& *G; 02- *G; 020 *G; 03& *G; 032 *G; 052 *G; 06- *G; 060 *G; 065
*G; 071 *G; 08- *G; 080 *G; 10- *G; 100 *G; 102 *G; 106 *G; 110 *G;
115 *G; 120 *G; 122 *G; 124 *G; 180 *G; 234 *G; 237 *G; 306 *G; 308
*B; 35& *B; 363 *B; 375 *B; 536 *B; 540 *B; 58& *B; 589 *B; 59- *B;
73& *B;

L130 ANSWER 98 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1975-32565 P

TITLE: FOOD- AND DRUG-REINFORCED RESPONDING. EFFECTS OF DITA AND
D-AMPHETAMINE.

AUTHOR: DOWNS D A; WOODS J H

LOCATION: ANN ARBOR, MICH., USA.

SOURCE: PSYCHOPHARMACOLOGIA (43, NO.1, 13-17, 1975)

AN 1975-32565 DRUGB P

FS D-Q 1964-1975

SH P Pharmacology

CC 26 Neurology

32 Psychotropic

IT NEW ANTIOBESITY THIOUREA ARYLKETONE ARYLCHLORIDE IMIDAZOLE I.V.

3&, 4&-DICHLORO-2- 2-IMIDAZOLIN-2-YL- THIO ACETOPHENONE

DOW-CHEMICAL PRE- CF. SELF-DOSAGE CF. DEXAMPHETAMINE INFLUENCE ON FOOD-
CF. DRUG-REINFORCED REFLEX-MOTIVE OPERANT REINFORCED BEHAVIOR MONKEY
ANORECTIC ANORECTICS

L130 ANSWER 99 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1974-34949 P E

TITLE: A STUDY ON THE PHYSIOLOGICAL DISPOSITION OF
ACETOPHENETIDIN BY THE DIABETIC MAN.

AUTHOR: DAJANI R M; KAYYALI S; SAHEB S E; BIRBARI A

LOCATION: BEIRUT, LEBANON.

SOURCE: COMP.GEN.PHARM. (5, NO.1, 1-9, 1974)

AN 1974-34949 DRUGB P E

FS D-Q 1964-1975

SH P Pharmacology

E Endocrinology

CC 4 Analgesics

8 Pharmacokinetics

12 Antidiabetics

IT P.O. PHENACETIN FLUKA CF. ANALGESIC C-AMIDE PARACETAMOL DRUG-METAB.
ELIMINATION RATE NORMAL CF. DIABETES 5 CASES ANALGESICS ANTIPYRETIC
ANTIPYRETICS PANCREOPATHY

L130 ANSWER 100 OF 101 DRUGB COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1973-20937 P E

TITLE: THE BIOTRANSFORMATION OF ACETOPHENETIDIN IN THE
ALLOXAN-DIABETIC RABBIT.

AUTHOR: DAJANI R M; KAYYALI S Y

LOCATION: BEIRUT, LEBANON.

SOURCE: COMP.GEN.PHARM. (4, NO.13, 23-35, 1973)

AN 1973-20937 DRUGB P E
FS D-Q 1964-1975
SH P Pharmacology
E Endocrinology
CC 4 Analgesics
8 Pharmacokinetics
12 Antidiabetics
IT I.P. P.O. PHENACETIN FLUKA DRUG-METAB. PHARMACOKINETICS CONC.
BLOOD-PLASMA ELIMINATION IN URINE AS DIFF.METABOLITE ETC. IN NORMAL CF.
NON- CF. INSULIN # LENTE-INSULIN TREATED I.V. ALLOXAN SIGMA-CHEM. INDUCED
DIABETES RABBIT ANALGESICS ANTIPYRETIC ANTIPYRETICS
PANCREOPATHY

L130 ANSWER 101 OF 101 DISSABS COPYRIGHT (C) 2006 ProQuest Information and Learning Company; All Rights Reserved on STN

ACCESSION NUMBER: 2001:20502 DISSABS Order Number: AAI9982908
TITLE: The insulin hexamer: A physical-biochemical characterization of ligand binding, allosteric transitions and electron transfer
AUTHOR: Leuenberger-Fisher, Melissa Rae [Ph.D.]; Dunn, Michael F.
[adviser]
CORPORATE SOURCE: University of California, Riverside (0032)
SOURCE: Dissertation Abstracts International, (2000) Vol.
61, No. 8B, p. 4139. Order No.: AAI9982908. 241 pages.
ISBN: 0-599-89319-2.

DOCUMENT TYPE: Dissertation
FILE SEGMENT: DAI
LANGUAGE: English

AB Protein conformational transitions in the insulin hexamer allow allosteric communication within the hexamer. These transitions provide important mechanisms through which hexamer stability can be modulated. Formation of the R state is driven by the binding of specific small molecules to two different classes of binding sites on the hexamer; the phenolic protein pockets and the His-B10 metal sites. Therefore, the cooperative binding of small molecules to the insulin hexamer provide crucial interactions that stabilize preparations for use in the treatment of diabetes mellitus.

Accordingly, binding of phenol-related compounds to the insulin hexamer phenolic pockets and the binding of anions to the metal sites has become a valuable tool for the study of allostery and cooperativity of ligand binding in an effort to further enhance the stability of insulin preparations for use by diabetics. p-Hydroxy acetophenone binds to the phenolic pocket. Using this reagent, the kinetics of the allosteric transition have been quantified.

A detailed investigation to determine the mechanistic and structural model of anion binding to the HisB10 metal sites of the insulin hexamer and its relevance to the allosteric transition has also been achieved. To determine the mechanism of anion binding, rapid kinetics and UV/Vis spectroscopy were used to investigate the chemistry of ligand exchange at the Zn(II) HisB10 binding sites.

Owing to the changes in coordination of the His-B10 metal ion site during the T- to R-state transition, substitution of Co²⁺ or Cu²⁺ for Zn²⁺ introduces chromophoric signals that are diagnostic of the conformational state of the hexamer. Cu²⁺ substituted derivatives of the insulin hexamer are unique in their ability to form complexes with arylthiolates to stabilize Cu(II) centers that replicate the distinctive electronic properties of blue copper proteins. (Abstract shortened by UMI.)

6/2000

Zhang 10/699,338

Zhang 10/699,338

12/06/2006

CC 0487 CHEMISTRY, BIOCHEMISTRY

=> d que 164

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
 L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
 L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
 L9 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENTS"+PFT,OLD,NEW/CT
 L10 QUE ABB=ON PLU=ON HYPERGLYCEMIA+PFT,OLD,NEW,RT/CT
 L11 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C
 T
 L12 QUE ABB=ON PLU=ON "DIABETES INSIPIDUS"+PFT,OLD,NEW,NT/
 CT
 L17 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
 L19 QUE ABB=ON PLU=ON "APPETITE DEPRESSANTS"+PFT,OLD,NEW,N
 T/CT
 L20 QUE ABB=ON PLU=ON "ANTIOBESITY AGENTS"+PFT,OLD,NEW,NT/
 CT
 L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDRO
 X?
 L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A) ?NITRO?
 L26 QUE ABB=ON PLU=ON (NSC(W)32113) OR NSC32113
 L32 QUE ABB=ON PLU=ON HANSEN, B?/AU
 L33 QUE ABB=ON PLU=ON HANSEN, T?/AU
 L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU
 L35 QUE ABB=ON PLU=ON TULLIN, S?/AU
 L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
 L37 QUE ABB=ON PLU=ON COLDING, M?/AU
 L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU
 L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS,PA,SO
 L43 158 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR L7
 L52 51 SEA FILE=HCAPLUS ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP"
 OR "6322-56-1D"
 L58 1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L43 OR L52) AND (L32 OR L33
 OR L34 OR L35 OR L36 OR L37 OR L38 OR L39)
 L59 0 SEA FILE=HCAPLUS ABB=ON PLU=ON (L24 OR L25 OR L26) AND (L32
 OR L33 OR L34 OR L35 OR L36 OR L37 OR L38 OR L39)
 L60 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 OR L59
 L61 383 SEA FILE=HCAPLUS ABB=ON PLU=ON ((L9 OR L10 OR L11 OR L12) OR
 L17 OR (L19 OR L20)) AND (L32 OR L33 OR L34 OR L35 OR L36 OR
 L37 OR L38)
 L62 47 SEA FILE=HCAPLUS ABB=ON PLU=ON L61 AND L39
 L63 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L62 AND ?ACETOPHEN?
 L64 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L60 OR L63

=> d que 189

L29 QUE ABB=ON PLU=ON (A61P003-04 OR A61P0003-04 OR A61P00
 3-04 OR A61P0003-04)/IPC
 L30 QUE ABB=ON PLU=ON (B14-E07 OR C14-E07 OR B14-E12 OR C1
 4-E12 OR B12-J02 OR C12-J02 OR B14-F09 OR C14-F09 OR B12-
 H05 OR C12-H05 OR B14-S04 OR C14-S04 OR B14-S04A OR C14-S
 04A)/MC
 L31 QUE ABB=ON PLU=ON (P731 OR P816)/M0,M1,M2,M3,M4,M5,M6
 L32 QUE ABB=ON PLU=ON HANSEN, B?/AU
 L33 QUE ABB=ON PLU=ON HANSEN, T?/AU

L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU
 L35 QUE ABB=ON PLU=ON TULLIN, S?/AU
 L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
 L37 QUE ABB=ON PLU=ON COLDING, M?/AU
 L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU
 L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS, PA, SO
 L42 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003
 L85 45 SEA FILE=WPIX ABB=ON PLU=ON (L32 OR L33 OR L34 OR L35 OR L36
 OR L37 OR L38) AND (L29 OR L30 OR L31)
 L86 38 SEA FILE=WPIX ABB=ON PLU=ON L85 AND L39
 L87 1 SEA FILE=WPIX ABB=ON PLU=ON L86 AND (?PHENON?/BIX,BIEX,ABEX,TT)
 L88 22 SEA FILE=WPIX ABB=ON PLU=ON L86 AND L42
 L89 22 SEA FILE=WPIX ABB=ON PLU=ON L87 OR L88

=> d que 198

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
 L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
 L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
 L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM?
 OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM?
 L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYC
 EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
 PERGLUCAEM?
 L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM?
 OR GLUCÈM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
 R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
 EM?
 L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPO
 LYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
 (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR G
 LUCEAM? OR GLUCAEM?))
 L21 QUE ABB=ON PLU=ON OBESO OR OBESITY OR ADIPOSITY OR COR
 PULENCE OR CORPULENC?
 L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
 ICORPULENC? OR ANTICORPULENC?
 L23 QUE ABB=ON PLU=ON CORPULENT
 L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A)?NITRO?) (5A)?HYDRO
 X?
 L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?))) (5A)?NITRO?
 L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113
 L28 QUE ABB=ON PLU=ON ANORECTIC
 L32 QUE ABB=ON PLU=ON HANSEN, B?/AU
 L33 QUE ABB=ON PLU=ON HANSEN, T?/AU
 L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU
 L35 QUE ABB=ON PLU=ON TULLIN, S?/AU
 L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
 L37 QUE ABB=ON PLU=ON COLDING, M?/AU
 L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU
 L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS, PA, SO
 L90 0 SEA FILE=MEDLINE ABB=ON PLU=ON L6 OR L7

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.L91      48 SEA FILE=MEDLINE ABB=ON PLU=ON (L24 OR L25 OR L26)
L92      QUE ABB=ON PLU=ON ACETOPHENONES+PFT,OLD,NEW,NT/CT
L93      QUE ABB=ON PLU=ON "ANTI-OBESITY AGENTS"+PFT,OLD,NEW,NT
/CT
L94      QUE ABB=ON PLU=ON "HYPOGLYCEMIC AGENTS"+PFT,OLD,NEW,NT
/CT
L95      QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
L96      QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C
T
L97      60 SEA FILE=MEDLINE ABB=ON PLU=ON ((L90 OR L91 OR L92) AND ((L93
OR L94 OR L95 OR L96) OR (L13 OR L14 OR L15 OR L16) OR (L21 OR
L22 OR L23) OR L28))
L98      0 SEA FILE=MEDLINE ABB=ON PLU=ON L97 AND (L32 OR L33 OR L34 OR
L35 OR L36 OR L37 OR L38 OR L39)

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=> d que l110
L1      2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
L3      TRANSFER PLU=ON L1 1- RN : 334 TERMS
L4      334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5      2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
L6      1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
L7      2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
L13     QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERG
LYCEM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLY
CEAM? OR ?GLYCAEM?
L14     QUE ABB=ON PLU=ON (HYPER(W)(GLYCEM? OR GLUCEM? OR GLYC
EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
PERGLUCAEM?
L15     QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W)(GLYCEM?
OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
EM?
L16     QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOG
LYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
(HYPO(W)(GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR G
LUCEAM? OR GLUCAEM?))
L21     QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR COR
PULENCE OR CORPULENC?
L22     QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
ICORPULENC? OR ANTICORPULENC?
L23     QUE ABB=ON PLU=ON CORPULENT
L24     QUE ABB=ON PLU=ON (?ACETOPHENON?(3A)?NITRO?)(5A)?HYDRO
X?
L25     QUE ABB=ON PLU=ON ((?PHENOL?(3A)(ACETO? OR ACETYL?)))(
5A)?NITRO?
L26     QUE ABB=ON PLU=ON (NSC(W)32113) OR NSC32113
L28     QUE ABB=ON PLU=ON ANORECTIC
L32     QUE ABB=ON PLU=ON HANSEN, B?/AU
L33     QUE ABB=ON PLU=ON HANSEN, T?/AU
L34     QUE ABB=ON PLU=ON SEHESTED, B?/AU
L35     QUE ABB=ON PLU=ON TULLIN, S?/AU
L36     QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
L37     QUE ABB=ON PLU=ON COLDING, M?/AU
L38     QUE ABB=ON PLU=ON JORGENSEN, M?/AU
L39     QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS,PA,SO
L100    0 SEA FILE=EMBASE ABB=ON PLU=ON L6 OR L7

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L101 QUE ABB=ON PLU=ON "ACETOPHENONE DERIVATIVE"+PFT,OLD,NE
W,NT/CT
L102 812 SEA FILE=EMBASE ABB=ON PLU=ON L100 OR L101 OR (L24 OR L25 OR
L26)
L103 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENT"+PFT,OLD,NEW,NT/
CT
L104 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C
T
L105 QUE ABB=ON PLU=ON "ANTIODESITY AGENT"+PFT,OLD,NEW,NT/C
T
L106 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
L109 720 SEA FILE=EMBASE ABB=ON PLU=ON (L32 OR L33 OR L34 OR L35 OR
L36 OR L37 OR L38 OR L39) AND ((L103 OR L104 OR L105 OR L106)
OR (L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)
L110 0 SEA FILE=EMBASE ABB=ON PLU=ON L109 AND L102

=> d his l123

(FILE 'BIOSIS, CABA, BIOTECHNO, DRUGU, VETU' ENTERED AT 11:24:41 ON 06
DEC 2006)

L123 0 S L119 AND L32-L39

=> d que l123

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERG
LYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLY
CEAM? OR ?GLYCAEM?
L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYC
EAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HY
PERGLUCAEM?
L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM?
OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
EM?
L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOG
LYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
(HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR G
LUCEAM? OR GLUCAEM?))
L21 QUE ABB=ON PLU=ON OBSE OR OBESITY OR ADIPOSITY OR COR
PULENCE OR CORPULENC?
L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
ICORPULENC? OR ANTICORPULENT?
L23 QUE ABB=ON PLU=ON CORPULENT
L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?TH
ERAP? OR REMED? OR ALLEVIAT?
L28 QUE ABB=ON PLU=ON ANORECTIC
L32 QUE ABB=ON PLU=ON HANSEN, B?/AU
L33 QUE ABB=ON PLU=ON HANSEN, T?/AU
L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU
L35 QUE ABB=ON PLU=ON TULLIN, S?/AU
L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
L37 QUE ABB=ON PLU=ON COLDING, M?/AU
L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU
L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS,PA,SO
L119 250 SEA ?ACETOPHEN?(15A)((L13 OR L14 OR L15 OR L16) OR (L21 OR L22
OR L23) OR L28 OR L27)
L123 0 SEA L119 AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR L38 OR

L39)

=> d his l127

(FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, JICST-EPLUS, JAPIO, LIFESCI, BIOENG, CABA, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 11:41:58 ON 06 DEC 2006)

L127 0 S L124 AND L32-L39

=> d que l127

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM? OR ?GLYCAEM?

L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?

L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? OR ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?

L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCEAM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR GLUCAEM?))

L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE OR CORPULENC?

L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?

L23 QUE ABB=ON PLU=ON CORPULENT

L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDROX?

L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A) ?NITRO?)

L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113

L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?THERAP? OR REMED? OR ALLEVIAT?

L28 QUE ABB=ON PLU=ON ANORECTIC

L32 QUE ABB=ON PLU=ON HANSEN, B?/AU

L33 QUE ABB=ON PLU=ON HANSEN, T?/AU

L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU

L35 QUE ABB=ON PLU=ON TULLIN, S?/AU

L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU

L37 QUE ABB=ON PLU=ON COLDING, M?/AU

L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU

L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS, PA, SO

L124 896 SEA (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A) ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28 OR L27)

L127 0 SEA L124 AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR L38 OR L39)

=> d his l128

(FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, JICST-EPLUS, JAPIO, LIFESCI, BIOENG, CABA, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 11:41:58 ON 06 DEC 2006)

L128 O S L124 AND L40

=> d que l128

L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM? OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM? OR ?GLYCAEM?

L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?

L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? OR ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?

L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM? OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR GLUCAEM?))

L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE OR CORPULENC?

L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPULENC? OR ANTICORPULENT?

L23 QUE ABB=ON PLU=ON CORPULENT

L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDROX?

L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A) ?NITRO?)

L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113

L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?THERAP? OR REMED? OR ALLEVIAT?

L28 QUE ABB=ON PLU=ON ANORECTIC

L40 QUE ABB=ON PLU=ON (HANSEN OR SEHESTED OR TULLIN OR COLDING OR JORGENSEN OR (COLDING(W) JORGENSEN)) /AU

L124 896 SEA (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A) ((L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28 OR L27)

L128 O SEA L124 AND L40

=> dup rem 164 189 198 1110 1123 1127 1128

L98 HAS NO ANSWERS

L110 HAS NO ANSWERS

L123 HAS NO ANSWERS

L127 HAS NO ANSWERS

L128 HAS NO ANSWERS

FILE 'HCAPLUS' ENTERED AT 12:25:42 ON 06 DEC 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE 'WPIX' ENTERED AT 12:25:42 ON 06 DEC 2006

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PROCESSING COMPLETED FOR L64

PROCESSING COMPLETED FOR L89

PROCESSING COMPLETED FOR L98

PROCESSING COMPLETED FOR L110

PROCESSING COMPLETED FOR L123

PROCESSING COMPLETED FOR L127

PROCESSING COMPLETED FOR L128

Zhang 10/699,338

12/06/2006

L131 22 DUP REM L64 L89 L98 L110 L123 L127 L128 (1 DUPLICATE REMOVED)
ANSWER '1' FROM FILE HCPLUS
ANSWERS '2-22' FROM FILE WPIX

=> file stnguide
FILE 'STNGUIDE' ENTERED AT 12:25:48 ON 06 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 1, 2006 (20061201/UP).

=> d ibib ed ab 1-22

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, WPIX' - CONTINUE? (Y)/N:Y

L131 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
 ACCESSION NUMBER: 2004:412795 HCAPLUS
 DOCUMENT NUMBER: 140:423475
 TITLE: Preparation of (hetero)arenes as safe mitochondrial uncouplers for the treatment of obesity
 INVENTOR(S): Hansen, Birgit Sehested; Tullin,
 Soren; Hansen, Thomas Kruse;
 Colding-Jorgensen, Morten
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: PCT Int. Appl., 133 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041256	A2	20040521	WO 2003-DK742	20031031
WO 2004041256	A3	20040902		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003275939	A1	20040607	AU 2003-275939	20031031
US 2004138301	A1	20040715	US 2003-699338	20031031
EP 1575575	A2	20050921	EP 2003-810374	20031031
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006514101	T2	20060427	JP 2005-502095	20031031
PRIORITY APPLN. INFO.:			DK 2002-1719	A 20021108
			DK 2003-734	A 20030514
			DK 2003-827	A 20030604
			US 2002-425642P	P 20021112
			US 2003-476275P	P 20030605
			WO 2003-DK742	W 20031031

OTHER SOURCE(S): CASREACT 140:423475; MARPAT 140:423475

ED Entered STN: 21 May 2004

AB This invention relates to chemical uncouplers with a broader safety window for use in treating obesity and obesity related diseases and conditions such as atherosclerosis, hypertension, diabetes, impaired glucose tolerance, dyslipidemia, coronary heart disease, gallbladder disease, osteoarthritis, endometrial, breast, prostate and colon cancers, premature death as well as other conditions which are improved by an increase in mitochondrial respiration. More specifically, the invention provides the use of compds. with an Emax of <75% of the Emax of carbonyl cyanide

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12/06/2006

p-trifluoromethoxyphenylhydrazone (FCCP) in a specified assay for increasing mitochondrial respiration. Thus, 3-tert-butyl-5-chloro-2-hydroxy-6-methyl-N-(4-nitro-2-trifluoromethylphenyl)benzamide (prepared from 3-tert-butyl-5-chloro-6-methylsalicylic acid and 4-nitro-2-trifluoromethylaniline) increased glucose utilization in FSK4 cells with EC₅₀ <0.03 μM and Emax = 75% of FCCP.

L131 ANSWER 2 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-607583 [57] WPIX
 DOC. NO. CPI: C2003-165311 [57]
 TITLE: Screening for modulators of expression of hepatocyte nuclear factor 4 alpha from hnf 4 alpha P2 promoter by assaying for change in expression level of reporter gene operably linked to promoter, after contact with modulator
 DERWENT CLASS: B04; D16
 INVENTOR: BOJ S F; FERNANDEZ S B; FERRER J P; FREDERIKSEN S K; HANSEN T; JENSEN M L; LEBL J; MAESTRO M A; PARRIZAS M; PEDERSEN O B; PRUHOVA S
 PATENT ASSIGNEE: (FERN-I) FERNANDEZ S B; (FERR-I) FERRER J P; (FRED-I) FREDERIKSEN S K; (PRIV-N) FUNDACIO PRIVADA CLINIC RECERCA BIOMEDIC; (HANS-I) HANSEN T; (JENS-I) JENSEN M L; (LEBL-I) LEBL J; (MAES-I) MAESTRO M A; (NOVO-C) NOVO NORDISK AS; (PARR-I) PARRIZAS M; (PEDE-I) PEDERSEN O B; (PRUH-I) PRUHOVA S
 COUNTRY COUNT: 98

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003016559	A2	20030227	(200357)*	EN	37[6]	
US 20040038219	A1	20040226	(200416)	EN		
AU 2002325821	A1	20030303	(200452)	EN		
AU 2002325821	A8	20051020	(200615)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003016559 A2		WO 2002-DK537	20020815
US 20040038219 A1	Provisional	US 2001-325271P	20010927
US 20040038219 A1		US 2002-228368	20020813
AU 2002325821 A1		AU 2002-325821	20020815

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002325821 A1	Based on	WO 2003016559 A
AU 2002325821 A8	Based on	WO 2003016559 A

PRIORITY APPLN. INFO: EP 2001-610085 20010817

ED 20050531

AB WO 2003016559 A2 UPAB: 20050531

NOVELTY - Screening (M1) for modulators of expression of hepatocyte nuclear factor (hnf)4alpha from hnf4alpha P2 promoter region (HP), involves obtaining transcription reporter system (TRS) comprising

nucleotide construct comprising reporter gene (R) under control of HP, contacting TRS with a putative modulator, and assaying for a change in the level of expression of (R).

DETAILED DESCRIPTION - Screening (M1) for modulators of expression of hepatocyte nuclear factor (hnf)4alpha from hnf4alpha P2 promoter region (HP), involves obtaining transcription reporter system (TRS) comprising nucleotide construct comprising reporter gene (R) under control of HP corresponding to nucleotides 1-1447 of a fully defined sequence of 2699 nucleotides (S1) as given in specification, or its fragment, contacting TRS with a putative modulator, and assaying for a change in the level of expression of (R).

INDEPENDENT CLAIMS are also included for the following:

(1) a modulator (I) of the expression of hnf4alpha identified by (M1); and

(2) screening for diabetes involves obtaining a sample nucleic acid from an animal, and analyzing the nucleic acid to detect a mutation in hnf4alpha P2 region having a sequence of (S1), where the mutation results in a lesser degree of expression of hnf4alpha, and a mutation in the HP is indicative for a propensity for diabetes.

ACTIVITY - Antidiabetic; Immunosuppressive. No supporting data is given.

MECHANISM OF ACTION - Modulator of hnf4alpha expression from hnf4alpha P2 promoter region.

USE - (I) is useful for treating diabetes in an animal, by modulating the expression of hnf4alpha in pancreatic cells, where the method involves modulating the expression hnf4alpha from HP corresponding to nucleotide 1-1447 of (S1). The modulation results in an increase of the expression of hnf4alpha. Preferably, the modulation is effected through hnflalpha binding site corresponding to nucleotides 79-93 of (S2) or its fragment to which hnflalpha is capable of binding. The method is useful for treating diabetes in a mammal preferably human being, where the mammal suffers from maturity onset diabetes of the young (MODY), preferably MODY1. The method is also useful for treating a mammal suffering from type 2 diabetes (all claimed).

L131 ANSWER 3 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-278384 [27] WPIX
 DOC. NO. CPI: C2003-072716 [27]
 TITLE: New 2,4-diaminothiazole derivatives are GSK-3 inhibitors useful e.g. in the treatment of e.g. of hyperglycemia, type 2 diabetes, obesity, Alzheimer's disease and bipolar disorders
 DERWENT CLASS: B03
 INVENTOR: BOWLER A N; HANSEN B F
 PATENT ASSIGNEE: (BOWL-I) BOWLER A N; (HANS-I) HANSEN B F; (NOVO-C)
NOVO NORDISK AS
 COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
<hr/>					
WO 2003011843	A1 20030213 (200327)*	EN	65	[0]	
EP 1417188	A1 20040512 (200431)	EN			
KR 2004029393	A 20040406 (200451)	KO			
AU 2002355623	A1 20030217 (200452)	EN			
BR 2002011626	A 20040824 (200458)	PT			

US 20040210063	A1	20041021	(200470)	EN
NO 2004000913	A	20040401	(200477)	NO
HU 2004001403	A2	20041028	(200478)	HU
ZA 2004000733	A	20041124	(200481)	EN 73
JP 2004538315	W	20041224	(200502)	JA 109
CN 1547574	A	20041117	(200516)	ZH
MX 2004000906	A1	20050101	(200564)	ES

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003011843	A1	<u>WO 2002-DK508</u>	<u>20020722</u>
AU 2002355623	A1	<u>AU 2002-355623</u>	<u>20020722</u>
BR 2002011626	A	<u>BR 2002-11626</u>	<u>20020722</u>
CN 1547574	A	<u>CN 2002-816635</u>	<u>20020722</u>
EP 1417188	A1	<u>EP 2002-750845</u>	<u>20020722</u>
EP 1417188	A1	<u>WO 2002-DK508</u>	<u>20020722</u>
BR 2002011626	A	<u>WO 2002-DK508</u>	<u>20020722</u>
NO 2004000913	A	<u>WO 2002-DK508</u>	<u>20020722</u>
HU 2004001403	A2	<u>WO 2002-DK508</u>	<u>20020722</u>
JP 2004538315	W	<u>WO 2002-DK508</u>	<u>20020722</u>
MX 2004000906	A1	<u>WO 2002-DK508</u>	<u>20020722</u>
JP 2004538315	W	<u>JP 2003-517035</u>	<u>20020722</u>
HU 2004001403	A2	<u>HU 2004-1403</u>	<u>20020722</u>
MX 2004000906	A1	MX 2004-906	20040129
ZA 2004000733	A	ZA 2004-733	20040129
KR 2004029393	A	KR 2004-701686	20040203
US 20040210063	A1	US 2004-770705	20040203
NO 2004000913	A	NO 2004-913	20040302

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1417188	A1	Based on WO 2003011843 A
AU 2002355623	A1	Based on WO 2003011843 A
BR 2002011626	A	Based on WO 2003011843 A
HU 2004001403	A2	Based on WO 2003011843 A
JP 2004538315	W	Based on WO 2003011843 A
MX 2004000906	A1	Based on WO 2003011843 A

PRIORITY APPLN. INFO: US 2001-309953P 20010803
DK 2001-1175 20010803
WO 2002-DK508 20020722

ED 20050528

AB WO 2003011843 A1 UPAB: 20060119

NOVELTY - 2,4-Diaminothiazole derivatives (I), their optical or geometric isomers or tautomers, mixtures of these or their salts, are new.

DETAILED DESCRIPTION - 2,4-Diaminothiazole derivatives of formula (I), their optical or geometric isomers or tautomers, mixtures of these or their salts, are new.

A = valence bond or 1-6C alkylene;

R3 = H;

R1 = H, -C(=O)OR10, -C(=O)R10, 1-6C alkyl, aryl-(1-6C alkyl), 3-8C cycloalkyl-(1-6C alkyl), heteroaryl(1-6C alkyl) or 3-8C heterocyclyl-1-6C alkyl; or

R1, R2 = H, -C(=O)OR19, -C(=O)R19 or 1-6C alkyl;
 B' = valence bond, C(=O), S(=O) or S(=O)2; and
 D = OH, halo, OH, CN, nitro, NR22R23, N(R22)OR23, C(=O)N R22R23,
 OC(=O)NR22R23, OCH2C(=O)NR22R23, 1-6C alkoxy, C(=O)OR22, C(O) R22,
 NHC(=O)R22, CHF2, CF3, OCF3, OCHF2, OCH2CF3, OCF2CHF2, SCF3, SR22,
 S(=O)R22, S(=O)2R22, S(=O)2NH2; 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl,
 which may be optionally substituted by 1 or 2 H, OH, halo, OH, CN, nitro,
 NR24R25, C(=O)N R24R25, OC(=O)N R24R25, OCH2C(=O)N R24R25, 1-6C alkoxy,
 C(=O)OR24, C(O)R24, NHC(=O)R6, CHF2, CF3, OCF3, OCHF2, OCH2CF3, OCF2CHF2,
 SCF3, SR6, S(=O)R24, S(=O)2R24, S(=O)2NH2; aryl, 3-8C cycloalkyl,
 heteroaryl, 3-8C heterocyclyl, aryl-(1-6C alkyl), 3-8C cycloalkyl-(1-6C
 alkyl), heteroaryl-(1-C alkyl), 3-8C-heterocyclyl-(1-6C alkyl), aryl-(1-6C
 alkoxy), 3-8C cycloalkyl-(1-6C alkoxy), heteroaryl(1-6C alkoxy),
 3-8C-heterocyclyl(1-6C alkoxy), C(=O)-aryl, C(=O)-(3-8C cycloalkyl),
 C(=O)-heteroaroyl, C(=O)-(3-8C-heterocyclyl, O-aryl, O-(3-8C cycloalkyl),
 O-heteroaryl, O-(3-8C heterocyclyl), S-aryl, S-(3-8C cycloalkyl),
 S-heteroaryl, S-(3-8C heterocyclyl), NH-aryl, NH-heteroaryl; where the
 ring groups may optionally be substituted by 1-3 OH, halo, CN, nitro,
 NR26R27, C(=O)NR26R27, OC(=O)NR26R27, OCH2C(=O)NR26R27, 1-6C alkoxy,
 C(=O)OR26, C(=O)R26, NHC(=O)R26, CHF2, CF3, OCF3, CHF2, OCH2CF3, OCF2CHF2,
 SCF3, SR26, S(=O)R26, S(=O)2R26, S(=O)2NH2.

with the proviso that the compound must not be of formula (II).

Full definitions are given in the Definitions Field (Full Definitions).

An INDEPENDENT CLAIM is also included for the use of compounds (I') (which are identical to (I) except that the proviso that they must not be of formula (A), does not apply) in a pharmaceutical composition for the treatment of diseases, disorders, syndromes, and conditions where the inhibition of GSK-3 is beneficial.

ACTIVITY - Antidiabetic; Anorectic; Cerebroprotective.

MECHANISM OF ACTION - GSK-3 inhibitor.

In an assay, 3-(4-amino-5-(5-chlorothiophene-2-carbonyl)thiazol-2-ylamino)propylcarbamic acid tert-butyl ester had an IC50 of less than micro M.

USE - (I) are used in the treatment of diseases, disorders, syndromes, and conditions related to GSK-3, and those where: inhibition of GSK-3 is beneficial; growth factor-induced inhibition of GSK-3 is insufficient; glycogen metabolism exhibits abnormalities; glycogen synthase is insufficiently activated; and blood glucose is elevated. (I) are particularly useful in the treatment of hyperglycemia, impaired glucose tolerance, type 2 diabetes, obesity, Alzheimer's disease and bipolar disorder (all claimed).

ADVANTAGE - Various compounds of the invention inhibited GSK-3 with an IC50 of less than 1 micro M.

L131 ANSWER 4 OF 22	WPIX COPYRIGHT 2006	THE THOMSON CORP on STN
ACCESSION NUMBER:	2003-221472 [21]	WPIX
DOC. NO. CPI:	C2003-056246 [21]	
TITLE:	New oxalylamide compounds useful in the treatment of e.g. type I diabetes	
DERWENT CLASS:	B02	
INVENTOR:	ANDERSEN H S; <u>HANSEN T K</u> ; LAU J; MOLLER N P H; OLSEN O H; PETERSEN A K; ANDERSEN S; HANSEN K; MOLLER P; OLSEN H; PETERSEN K	
PATENT ASSIGNEE:	(ANDE-I) ANDERSEN H S; (HANS-I) HANSEN T K; (LAUJ-I) LAU J; (MOLL-I) MOLLER N P H; (NOVO-C) <u>NOVO NORDISK AS</u> ; (OLSE-I) OLSEN O H; (PETE-I) PETERSEN A K	

Zhang 10/699,338

12/06/2006

COUNTRY COUNT: 99

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003002569	A1	20030109	(200321)*	EN	92[0]	
US 20030064979	A1	20030403	(200325)	EN		
EP 1404682	A1	20040407	(200425)	EN		
AU 2002315244	A1	20030303	(200452)	EN		
JP 2004535451	W	20041125	(200477)	JA	163	
EP 1404682	B1	20050914	(200560)	EN		
DE 60206174	E	20051020	(200571)	DE		
DE 60206174	T2	20060622	(200643)	DE		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003002569	A1	WO 2002-DK425	20020625
US 20030064979	A1 Provisional	US 2001-309457P	20010801
US 20030064979	A1 Provisional	US 2002-350637P	20020122
AU 2002315244	A1	AU 2002-315244	20020625
DE 60206174	E	DE 2002-606174	20020625
EP 1404682	A1	EP 2002-740410	20020625
EP 1404682	B1	EP 2002-740410	20020625
DE 60206174	E	EP 2002-740410	20020625
EP 1404682	A1	WO 2002-DK425	20020625
JP 2004535451	W	WO 2002-DK425	20020625
EP 1404682	B1	WO 2002-DK425	20020625
DE 60206174	E	WO 2002-DK425	20020625
US 20030064979	A1	US 2002-185901	20020627
JP 2004535451	W	JP 2003-508950	20020625
DE 60206174	T2	DE 2002-606174	20020625
DE 60206174	T2	EP 2002-740410	20020625
DE 60206174	T2	WO 2002-DK425	20020625

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 60206174	E	Based on EP 1404682 A
EP 1404682	A1	Based on WO 2003002569 A
AU 2002315244	A1	Based on WO 2003002569 A
JP 2004535451	W	Based on WO 2003002569 A
EP 1404682	B1	Based on WO 2003002569 A
DE 60206174	E	Based on WO 2003002569 A
DE 60206174	T2	Based on EP 1404682 A
DE 60206174	T2	Based on WO 2003002569 A

PRIORITY APPLN. INFO: DK 2002-105 20020121
DK 2001-1022 20010629

ED 20050528

AB WO 2003002569 A1 UPAB: 20060119

NOVELTY - Oxallylamide compounds (I) or their salts, acids or bases are new.

DETAILED DESCRIPTION - Oxallylamide compound of formula (I) or their

salts, acids or bases are new.

R1, R2 = H or functional group that can be converted to H in vivo;
R3, R4 = 1-10C alkyl, 2-10C alkenyl, 2-10C alkynyl, aryl,
aryl-1-10C alkyl, 1-10C alkoxy-1-10C alkyl, aryloxy-1-10C alkyl,
aryl-1-10C alkyloxy-1-10C alkyl, 1-10C alkylamino-1-10C alkyl, 1-10C
alkylthio-1-10C alkyl, aryl-1-10C alkyl-amino-1-10C alkyl, di(aryl-1-10C
alkyl)amino-1-10C alkyl, 1-10C alkylcarbonyl-amino-1-10C alkyl, aryl-1-10C
alkylcarbonylamino-1-10C alkyl, H or CONR5R6;

R5, R6 = 1-10C alkyl, 2-10C alkenyl, 2-10C alkynyl, aryl,
aryl-1-10C alkyl, 1-10C alkylcarbonyl, 1-10C alkyloxocarbonyl,
arylcarbonyl, aryloxocarbonyl, aryl-1-10C alkyl-carbonyl or aryl-1-10C
alkyloxocarbonyl, optionally saturated cyclic 5 - 7-membered amine, imide
or lactam or H;

R5+R6 = optionally saturated or aromatic, cyclic, bicyclic or
tricyclic 3-14C ring system containing 0 - 3 additional heteroatom
selected from N, O or S and optionally mono-substituted by 1-10C alkyl,
2-10C alkenyl, 2-10C alkynyl, aryl, aryl-1-10C alkyl, OH, oxo, 1-10C
alkyloxy, aryl-1-10C alkyloxy, 1-10C alkyloxy-1-10C alkyl, NR7R8 or 1-10C
alkylamino-1-10C alkyl;

R7, R8 = 1-10C alkyl, 2-10C alkenyl, 2-10C alkynyl, aryl,
aryl-1-10C alkyl, 1-10C alkyl-carbonyl, arylcarbonyl, aryl-1-10C
alkylcarbonyl or (aryl)1-10C alkylcarboxy or H;

A = absent, (C(R9R10))i, -(C(R11R12))j-C(R13)=C(R14)-(C(R15R16))k,
-(C(R17R18))y-(X)-(C(R19R20))z or an (hetero)aryl radical of formulae (i)
- (iii), naphthyl (substituted at 2-position by -(Y)m- and at 3-position
by -(U)n- and by R22), thienyl (substituted at 3-position by -(Y)m- and at
4-position by -(U)n- and by R23), thienyl (substituted at 2-position by
-(U)n- at 3-position by -(Y)m- and by R23) or thienyl (substituted at
2-position by -(U)n-, at 5-position by -(Y)m- and by R23);

X = O, NR21 or S;

i = 1 - 4;

y, z = 0 - 3;

j, k = 0 - 2;

B', D, E, G and J = C or N;

Y, U = valence bond, 1-4C alkyl, oxy, thio or NR24;

n, m = 1 - 2;

R22, R23 = H, halo, NO₂, cyano, trihalomethyl, 1-10C alkyl, 2-10C
alkenyl, 2-10C alkynyl, aryl, aryl-1-10C alkyl, OH, 1-10C alkyloxy, 1-10C
alkyloxy-1-10C alkyl, aryloxy, aryl-1-10C alkyl-oxy, aryl-1-10C
alkyloxy-1-10C alkyl, 1-10C alkylthio, 1-10C alkylthio-1-10C alkyl,
arylthio, aryl-1-10C alkylthio, aryl-1-10C alkylthio-1-10C alkyl, NR25R26,
1-10C alkylcarbonyl, 1-10C alkyl-carbonylamino, aryl-1-10C
alkylcarbonylamino or CONR27R28;

M = absent or -(C(R29R30))p-;

p = 1 - 3;

W' = valence bond or -(C(R31R32))q;

W1 = valence bond or -(C(R32R34))qq;

q, qq = 1 - 2;

R9 - R16, R18 - R21 and R31 - R34 = 1-4C alkyl, 2-10C alkenyl,
2-10C alkynyl, aryl or aryl-1-4C alkyl or H;

R21, R24 - R28 = H, 1-10C alkyl, 2-10C alkenyl, 2-10C alkynyl, aryl
or aryl-1-10C alkyl.

Provided that A and M cannot be both absent. The alkyl, alkenyl,
alkynyl and aryl groups of R3 - R8, R9 - R16, R18 - R21 and R31 - R34 are
optionally substituted by at least one of CN, NO₂, halo, OH,
trihalomethyl, 1-10C alkyl, 1-10C alkoxy or aryl.

ACTIVITY - Antidiabetic; Nootropic; Neuroprotective; Virucide;

Neuroleptic; Antiallergic; Osteopathic; Cytostatic; Antipsoriatic; Anorectic; Immunosuppressive.

MECHANISM OF ACTION - Protein Tyrosine Phosphatase 1B (PTP 1B) and/or T-cell protein tyrosine phosphatase (TC-PTP) and/or Protein Tyrosine Phosphatase (PTPase) Inhibitors.

USE - In the treatment of type 1 diabetes, type 2 diabetes, impaired glucose tolerance, insulin resistance, leptin resistance, obesity, immune dysfunction including autoimmunity, diseases with dysfunction of the coagulation system, allergic disease, osteoporosis, proliferative disorders including cancer, psoriasis, disease with decreased or increased synthesis or effects of growth hormone, diseases with decreased or increased synthesis of hormones or cytokine that regulate the release of/or response to growth hormone, disease of the brain including Alzheimer's disease and schizophrenia and infectious disease (claimed).

ADVANTAGE - The compounds are potent and selective inhibitors of PTP 1B and/or TC-PTP and/or PTPase and binds to the active site of PTP1B and TC-PTP and/or PTPase having aspartic acid in 48 position.

L131 ANSWER 5 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-489884 [52] WPIX
 DOC. NO. CPI: C2002-139054 [52]
 TITLE: A composition useful for the treatment and/or prevention of disorders and diseases e.g. Alzheimer's disease, comprises at least one active ingredient
 DERWENT CLASS: B02; B03
 INVENTOR: BOWLER A N; HANSEN B F; KURTZHALS P; OLESEN P H; SORENSEN A R; WORSAE H
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS
 COUNTRY COUNT: 95

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2002032896	A1	20020425	(200252)*	EN	71[0]	<--
AU 2002010385	A	20020429	(200255)	EN		<--
						<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002032896	A1	WO 2001-DK676	20011012
AU 2002010385	A	AU 2002-10385	20011012

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
AU 2002010385	A	Based on	WO 2002032896 A

PRIORITY APPLN. INFO: US 2000-242409P 20001020
DK 2000-1537 20001016

ED 20050526

AB WO 2002032896 A1 UPAB: 20050526

NOVELTY - A composition comprises at least one active ingredient (I), its

optical or geometric isomers and/or tautomeric form or salts.

DETAILED DESCRIPTION - A composition comprises at least one active ingredient of formula (I), its optical or geometric isomer and/or tautomeric form or salt.

R1 = -CN, -C(=O)NR6R7, -C(=O)NH-NR6R7, -C(=O)NH-N=CR6R7, -C(=O)OR7, -CR6=N-NH-C(=O)R7 or a group of formula (I');

X, Y = =C- or =N(R6)-;

R7 = H, 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, (hetero)aryl, 3-8C cycloalkyl, 3-8C heterocyclyl, aryl-(1-6C)-alkyl, heteroaryl-(1-6C)-alkyl, heteroaryl-amino-(1-6C)-alkyl, 3-8C cycloalkyl-(1-6C)-alkyl, 3-8C heterocyclyl-(1-6C)-alkyl, aryl-(2-6C)-alkenyl, heteroaryl-(2-6C)-alkenyl, 3-8C cycloalkyl-(2-6C)-alkenyl, 3-8C heterocyclyl-(2-6C)-alkenyl, aryl-(2-6C)-alkynyl, heteroaryl-(2-6C)-alkynyl, 3-8C cycloalkyl-(2-6C)-alkynyl or 3-8C heterocyclyl-(2-6C)-alkynyl (cyclic moieties are optionally substituted by 1-3 Q');

2 Q' in adjacent positions = -O-(CH₂)_m-O- radical;

m = 1-2;

CR6R7 = mono-, bi- or tricyclic, 3-14 membered ring system (optionally substituted by 1-3 Q');

R2, R3 = H, 1-6C alkyl, (hetero)aryl, aryl-(1-6C)-alkyl or heteroaryl-(1-6C)-alkyl (cyclic moieties are optionally substituted by 1-3 halo, nitro, CN, oxo, trifluoromethyl, OH, 1-6C alkoxy, carboxy, 1-6C alkoxy carbonyl, 1-6C alkyl (optionally substituted by OH), NR10R11, -S-(1-6C)-alkyl, -S(=O)-(1-6C)-alkyl, -S(=O)2-(1-6C)-alkyl or -S(=O)2NR10R11); or

NR2R3 = Q (where the ring is optionally annealed with (hetero)aryl);

Q = 3-7 membered heterocyclic ring containing 1-2 N, O and/or S;

R4-R6, R8-R11 = H or 1-6C alkyl; or

NR4R5 = Q.

INDEPENDENT CLAIMS are also included for:

(1) new compounds of formula (I'), their optical or geometric isomers and/or tautomeric form or salts;

(2) use of (I), its optical or geometric isomer and/or tautomeric form or salt for the preparation of a pharmaceutical for the treatment and/or delaying or prevention of the progression of diseases, disorders and conditions by inhibiting GSK-3; and

(3) Use of (I) in combination with at least one antidiabetic, antiobesity and antihypertensive agents.

ACTIVITY - Antidiabetic; Nootropic; Neuroprotective; Antilipemic; Anorectic; Cardiant; Hypotensive; Antimanic; Anticonvulsant; Antiparkinsonian; Tranquilizer; Dermatological; Cytostatic.

MECHANISM OF ACTION - Glycogen synthase kinase-3 (GSK-3) inhibitor. GSK-3beta was incubated with glycogen synthase substrate (32 microM) and 1-(4-aminofuran-3-yl)-5-piperidin-1-ylmethyl-1H-(1,2,3)triazole-4-carboxylic acid hydrazide (Ia) in buffer containing 33P labeled ATP (0.1 mM), magnesium acetate (10 mM), MOPS (8 mM), pH 7.0, EDTA (0.2 mM), 0.1% dithiothreitol and Triton-X100 RTM) (0.03%) for 60 minutes at room temperature. The reaction was terminated by filtration followed by addition of phosphoric acid (25 microl) to each well. 1-(4-aminofuran-3-yl)-5-piperidin-1-ylmethyl-1H-(1,2,3)triazole-4-carboxylic acid hydrazide (Ia) inhibited GSK-3 with an IC₅₀ of less than 10 microM.

USE - For treatment and/or delaying or prevention of the progression of diseases, disorders and conditions related to GSK-3, abnormalities exhibiting glycogen metabolism, hyperglycemia, IGT, Type 1 diabetes, Type 2 diabetes, Alzheimer's disease, bipolar disorder (all claimed); dyslipidemia, hypertriglyceridemia, syndrome X, insulin

resistance, obesity, diabetes, diabetic dyslipidemia, hyperlipidemia, cardiovascular disease, hypertension, appetite regulation and energy expenditure disorders such as eating disorders (e.g. bulimia), manic depression syndrome, mania, Huntington's chorea, Parkinson's disease, amyotrophic lateral sclerosis, multiple sclerosis, leukopenia, anxiety, movement disorder, aggression, psychosis, seizures, panic attacks, hysteria or sleep disorders, cancer, hair loss and neurotraumatic diseases. Also useful as contraceptives.

ADVANTAGE - (I) Activates glycogen synthase and lowers or elevates blood glucose.

L131 ANSWER 6 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-383097 [41] WPIX
 DOC. NO. CPI: C2002-107958 [41]
 TITLE: Use of compound that induces calcium ion release through type 1 ryanodine receptor to treat obesity
 DERWENT CLASS: B05
 INVENTOR: BARSOUMIAN E L; BOONEN H C M; DIN N; FLEDELIUS C; NIELSEN E B; NISHIMURA S; RAUN K; STIDSEN C E; TULLIN S; WIELAND H A
 PATENT ASSIGNEE: (BOEH-C) BOEHRINGER INGELHEIM INT GMBH; (NOVO-C)
NOVO NORDISK AS
 COUNTRY COUNT: 92

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2002022122	A1	20020321	(200241)*	EN	24[0]	<--
AU 2000072704	A	20020326	(200251)	EN		<--
						<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002022122	A1	WO 2000-DK514	20000915
AU 2000072704	A	AU 2000-72704	20000915
AU 2000072704	A	WO 2000-DK514	20000915

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000072704	A	Based on
		WO 2002022122 A

PRIORITY APPLN. INFO: WO 2000-DK514 20000915

ED 20050525

AB WO 2002022122 A1 UPAB: 20050525

NOVELTY - Use of a compound (I) that induces calcium ion (Ca^{2+}) release through type 1 ryanodine receptor (Ryr1) for the manufacture of medicaments to treat obesity is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) method for identifying Ryr1 agonists using skeletal muscle microsomes or membrane preparations from cell lines that express Ryr1 recombinantly or endogenously for screening out compounds that affect the

binding of 3H-ryanodine to Ryrl; and

(2) method for identifying Ryrl agonists using cell lines that express Ryrl recombinantly or endogenously for screening out compounds that induce Ca²⁺ release through Ryrl.

ACTIVITY - Anorectic.

No biological data given in the source material.

MECHANISM OF ACTION - Ryrl receptor agonist.

No biological data given in the source material.

USE - For treating obesity, reducing body mass index and increasing energy expenditure.

ADVANTAGE - None stated.

L131 ANSWER 7 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-188466 [24] WPIX

DOC. NO. CPI: C2002-058224 [24]

TITLE: New thienopyridines useful as protein tyrosine phosphate inhibitors or modulators in the treatment of e.g. type I and II diabetes diseases with dysfunctions of the coagulation system

DERWENT CLASS: B02

INVENTOR: ANDERSEN H; ANDERSEN H S; AXE F; AXE F U; BAKIR F; GE Y;

HANSEN T; HANSEN T K; HOLSWORTH D;

HOLSWORTH D D; JUDGE L; JUDGE L M; LAU J; MOLLER N P;

MOLLER N P H; NEWMAN M; NEWMAN M J; OLSEN O; OLSEN O H;

SHAPIRA B; SHAPIRA B Z; UYEDA R; UYEDA R T; ANDERSEN S;

AXE U; HANSEN K; JUDGE M; MOLLER H; NEWMAN J; OLSEN H;

SHAPIRA Z; UYEDA T

PATENT ASSIGNEE: (ANDE-I) ANDERSEN H S; (AXEF-I) AXE F U; (BAKI-I) BAKIR F; (GEYY-I) GE Y; (HANS-I) HANSEN T K; (HOLS-I) HOLSWORTH D D; (JUDG-I) JUDGE L M; (LAUJ-I) LAU J; (MOLL-I) MOLLER N P H; (NEWM-I) NEWMAN M J; (NOVO-C) NOVO NORDISK AS; (OLSE-I) OLSEN O H; (ONTO-N) ONTOGEN CORP; (SHAP-I) SHAPIRA B Z; (UYED-I) UYEDA R T

COUNTRY COUNT: 94

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2002004459	A1	20020117	(200224)*	EN	85[0]	<--
AU 2001070475	A	20020121	(200234)	EN		<--
US 20020151561	A1	20021017	(200281)	EN		<--
EP 1301516	A1	20030416	(200328)	EN		<--
US 6613903	B2	20030902	(200359)	EN		<--
JP 2004502775	W	20040129	(200413)	JA	156	
EP 1301516	B1	20060322	(200622)	EN		
DE 60118195	E	20060511	(200634)	DE		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002004459	A1	WO 2001-DK451	20010628
US 20020151561	A1 Provisional	US 2000-235726P	20000927
US 6613903	B2 Provisional	US 2000-235726P	20000927

AU 2001070475 A	AU 2001-70475 20010628
EP 1301516 A1	EP 2001-949271 20010628
EP 1301516 B1	EP 2001-949271 20010628
EP 1301516 A1	WO 2001-DK451 20010628
JP 2004502775 W	WO 2001-DK451 20010628
EP 1301516 B1	WO 2001-DK451 20010628
US 20020151561 A1	US 2001-901367 20010709
US 6613903 B2	US 2001-901367 20010709
JP 2004502775 W	JP 2002-509324 20010628
DE 60118195 E	DE 2001-618195 20010628
DE 60118195 E	EP 2001-949271 20010628
DE 60118195 E	WO 2001-DK451 20010628

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001070475	A	Based on
EP 1301516	A1	Based on
JP 2004502775	W	Based on
EP 1301516	B1	Based on
DE 60118195	E	Based on
DE 60118195	E	Based on

PRIORITY APPLN. INFO: DK 2000-106820000707

ED 20050525

AB WO 2002004459 A1 UPAB: 20050525

NOVELTY - Thienopyridines (I), their acidic or basic salts, and/or any optical isomers are new.

DETAILED DESCRIPTION - Thienopyridines of formula (I), their acidic or basic salts, and/or any optical isomers are new.

X = -C(O) or -S(O)2-;

R1 and R2 = H or a functional group that can be converted to hydrogen (in vivo);

R3 = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, T, T-R10-, T-N(R35)-, T-R11-N(R36)-, N(R37)(R38)-R39-, 16C alkyloxy or T-R13-O-;

T = phenyl, biphenyl, indenyl, naphthyl, imidazolyl, 1,2,3-triazolyl, thiophenyl, pyridyl, (iso)quinolyl, benzofuranyl, indolyl or benzimidazolyl (all optionally substituted by T');

T' = halogen, nitro, cyano, hydroxy, trihalomethyl, 1-6C alkyl, R42-, R42-R14-, 1-6C alkyloxy, R42-O-, R42-S(O)2-, R42-R15-O-, R42-N(R16)-, R18-C(O)-N(R19)-, R40C(O)-O-R41-O-C(O)-, R42-C(O)-N(R21)- or R42-R23-C(O)-N(R24)-;

R4 = H, R27-O-C(O)-, T''-R28-O C(O)-, R29-C(O)-R30-O-C(O)- or T'''-R31-C(O)-O-R32-O-C(O)-;

T''' = phenyl, naphthyl or thiophenyl (all optionally substituted by T''');

T'''' = halogen, nitro, cyano, trihalomethyl, R43-, R43 - R33-, 1-6C alkyloxy or R43 - R34-O-;

R5, R7 - R11, R13 - R15, R23, R28, R31-R34, R39 and R41 = 1-6 alkylene;

R6, R12, R17, R18, R27, R29 and R40 = 1-6C alkyl;

R16, R19, R21, R24 and R35 - R38 = H or 1-6C alkyl;

R42 and R43 = phenyl, naphthyl or thiophenyl.

ACTIVITY - Antidiabetic; anorectic; immunosuppressive; antiallergic; cytostatic; antipsoriatic; nootropic; neuroprotective; neuroleptic.

MECHANISM OF ACTION - Protein tyrosine phosphatase (PTPase) inhibitor or modulator.

A truncated form of PTP1B expressed in E.Coli was used to evaluate the biological activity of 7-(benzoylaminomethyl)-2-(oxallylamino)-4,5,6,7-tetrahydrothieno(2,3-c)pyridine-3-carboxylic acid (A). The enzyme reactions were carried out using standard conditions as described by Burke et.al. (Biochemistry 35; 15989-15996 (1996)). Appropriate concentrations of (A) were added to the reaction mixtures containing different concentrations of the substrate, para-nitrophenyl phosphate (0.16 - 10 mm of final concentration). The buffer used was sodium acetate (100 mm; pH 5.5), sodium chloride (50 mm), bovine serum albumin (0.1 % (w/v)) and dithiothreitol (5 mm). The reaction was started by addition of the enzyme and carried out in microtiter plates at 25 degrees C for 60 minutes. The reactions were stopped by addition of NaOH. The enzyme activity was determined by measurement of the absorbance at 405 nm of (A). (A) Showed Ki (inhibition of classical PTP1B) value of 0.49 microm.

USE - For treating type I and II diabetes, impaired glucose tolerance, insulin resistance or obesity, immune dysfunctions including autoimmunity, diseases with dysfunctions of the coagulation system, allergic diseases, osteoporosis, proliferative disorders including cancer and psoriasis, diseases with decreased or increased synthesis or effects of growth hormone, diseases with decreases or increased synthesis of hormones or cytokines that regulate the release and/or response to growth hormone, disease of barrier including Alzheimer's disease, schizophrenia, and infection diseases.

ADVANTAGE - (I) posses improved bioavailability and becomes active in cells after uptake.

L131 ANSWER 8 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-164628 [21] WPIX
 DOC. NO. CPI: C2002-050901 [21]
 TITLE: New thienopyridines useful for treating type I or II diabetes
 DERWENT CLASS: B02
 INVENTOR: ANDERSEN H S; AXE F U; BAKIR F; GE Y; HANSEN T K
 ; HOLSWORTH D D; JUDGE L M; LAU J; MOLLER N P H; NEWMAN M
 J; OLSEN O H; SHAPIRA B Z; UYEDA R T
 PATENT ASSIGNEE: (ANDE-I) ANDERSEN H S; (AXEF-I) AXE F U; (BAKI-I) BAKIR
 F; (GEYY-I) GE Y; (HANS-I) HANSEN T K; (HOLS-I) HOLSWORTH
 D D; (JUDG-I) JUDGE L M; (LAUJ-I) LAU J; (MOLL-I) MOLLER
 N P H; (NEWM-I) NEWMAN M J; (NOVO-C) NOVO NORDISK
 AS; (OLSE-I) OLSEN O H; (ONTO-N) ONTOGEN CORP;
 (SHAP-I) SHAPIRA B Z; (UYED-I) UYEDA R T
 COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2002004458	A1	20020117 (200221)*	EN	77[0]		<--
AU 2001068951	A	20020121 (200234)	EN			<--
US 20020099073	A1	20020725 (200254)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002004458 A1		WO 2001-DK450 20010628	
US 20020099073 A1	Provisional	US 2000-235615P 20000927	
AU 2001068951 A		AU 2001-68951 20010628	
US 20020099073 A1		US 2001-901284 20010709	

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001068951 A	Based on	WO 2002004458 A

PRIORITY APPLN. INFO: DK 2000-1066 20000707

ED 20050525

AB WO 2002004458 A1 UPAB: 20050525

NOVELTY - Thienopyridines, or their acidic or basic salts, any optical isomers or their mixture, including a racemic mixture, or any tautomeric forms are new.

DETAILED DESCRIPTION - Thienopyridines of formula (I), their acidic or basic salts, any optical isomers or their mixtures, including racemic mixture or any tautomeric forms are new.

X = -C(O) or -S(O)2-;

R1 and R2 = H or a functional group that can be converted to hydrogen in vivo;

R3 = H, 1-6C alkyl, H2N-R35-, 2-6C alkenyl, 2-6C alkynyl, T, T-R10-, T-N(R35)-, T-R11-N(R36)-, 1-6C alkyloxy or T-R13-O-;

T = phenyl, biphenyl, indenyl, naphthyl, imidazolyl, 1, 2, 3-triazolyl, thiophenyl, pyridyl, quinolyl, isoquinolyl, indolyl or benzimidazolyl (all optionally substituted with T');

T' = halogen, nitro, cyano, hydroxy, trihalomethyl, 1-6C alkyl, R37-aryl-, R38-, R38-R14-, 1-6C alkyloxy, R38-O-, R38-R15-O-, R38-N(R16)-, R18-C(O)-N(R19)-, R38-C(O)-N(R21)- or R38-R23-C(O)-N(R24)-;

R4 = H, 1-6C alkyl, T-R26-, R27-O-C(O)-, T-R28-O-C(O)-, R29-C(O)-O-R30-O-C(O)- or T-R31-C(O)-O-R32-O-C(O)-;

T = phenyl, naphthyl or thiophenyl (all optionally substituted with T');

T' = halogen, nitro, cyano, trihalomethyl, R39-, R39-R33-, 1-6C alkyloxy, or R39-R34-O-;

R5, R7 - R11, R13 - R15, R23, R26, R28, and R30 - R35 = 1-6C alkylene;

R6, R12, R17, R18, R20, R22, R25, R27 and R29 = 1-6C alkyl;
R16, R39 = phenyl, naphthyl or thiophenyl.

ACTIVITY - Antidiabetic; anorectic; immunosuppressive; antiallergic; cytostatic; antipsoriatic; nootropic; neuroprotective; neuroleptic.

MECHANISM OF ACTION - Protein tyrosine phosphate (PTPase) inhibitor or modulator. A truncated form of PTP1B expressed in E.Coli was used to evaluate the biological activity of 5-(benzoylamino-methyl)-2-(oxaryl-amino)-4,5,6,7-tetrahydro(2,3-c) pyridine-3-carboxylic acid (A). The enzyme reactions were carried out using standard conditions as described by Burke et.al. (Biochemistry 35; 15989-15996 (1996)). Approximate concentrations of (A) were added to the reaction mixtures containing different concentrations of the substrate, para-nitrophenyl phosphate (0.16 - 10 mM of final concentration). The buffer used was sodium acetate (100 mM; pH 5.5), sodium chloride (50 mM), bovine serum albumin (0.1% (w/v)) and dithiothreitol (5 mM). The reaction was started by addition of

the enzyme and carried out in microtiter plates at 25 degreesC for 60 minutes. The reactions were stopped by addition of NaOH. The enzyme activity was determined by measurement of the absorbance at 405 nm of (A). (A) Showed Ki (inhibition of classical PTP1B) value of 0.52 microm.

USE - For treating type 1 and 2 diabetes, impaired glucose tolerance, insulin resistance or obesity, immune dysfunctions including autoimmunity, diseases with dysfunctions of the coagulations system, allergic diseases, osteoporosis, proliferative disorders including cancer and psoriasis, diseases with decreased or increased synthesis or effects of growth hormone, diseases with decreases or increased synthesis of hormones or cytokines that regulate the release of/or response to growth hormone, disease of barrier including Alzheimer's disease and schizophrenia, and infection diseases.

ADVANTAGE - (I) are inhibitors or modulators of protein tyrosine phosphatase (PTPases) including PTP1B and T cell PTP (TC-PTP).

L131 ANSWER 9 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2001-541521 [60] WPIX
 DOC. NO. CPI: C2001-161632 [60]
 TITLE: Use of a compound such as adenosine or ghrelin that acts as a ligand for the receptor GHS-R 1A to regulate food intake
 DERWENT CLASS: B05
 INVENTOR: ANDERSEN M B; HANSEN B S; RAUN K; THIM L;
TULLIN S
 PATENT ASSIGNEE: (ANDE-I) ANDERSEN M B; (HANS-I) HANSEN B S; (NOVO-C)
NOVO NORDISK AS; (RAUN-I) RAUN K; (THIM-I) THIM
 L; (TULL-I) TULLIN S
 COUNTRY COUNT: 92

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001056592	A1	20010809	(200160)*	EN	23[0]	<--
US 20010020012	A1	20010906	(200160)	EN		<--
AU 2001028325	A	20010814	(200173)	EN		<--
US 20040063636	A1	20040401	(200425)	EN		<--
US 20060039862	A1	20060223	(200615)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001056592	A1	WO 2001-DK64	20010129
US 20010020012	A1 Provisional	US 2000-181303P	20000209
US 20040063636	A1 Provisional	US 2000-181303P	20000209
AU 2001028325	A	AU 2001-28325	20010129
US 20010020012	A1	US 2001-771770	20010129
US 20040063636	A1 Cont of	US 2001-771770	20010129
US 20040063636	A1	US 2003-649386	20030827
US 20060039862	A1 Provisional	US 2000-181303P	20000209
US 20060039862	A1 Cont of	US 2001-771770	20010129
US 20060039862	A1 Cont of	US 2003-649386	20030827
US 20060039862	A1	US 2005-150736	20050610

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001028325 A	Based on	WO 2001056592 A

PRIORITY APPLN. INFO: DK 2000-1107 20000717
DK 2000-161 20000201

ED 20050526

AB WO 2001056592 A1 UPAB: 20060117

NOVELTY - Use of a compound that is a ligand for the receptor GHS-R 1A or its salts for the manufacture of a medicament for the regulation of food intake.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(i) a method for identifying compounds (I) for the regulation of food intake which comprises screening out compounds; and
(ii) a composition which comprises compound or its salt as an active ingredient with a carrier or diluent.

ACTIVITY - Antidiabetic; anorectic.

No biological data given.

MECHANISM OF ACTION - Receptor GHS-R 1A agonist; receptor GHS-R 1A antagonist.

USE - For the regulation of food intake for the manufacture of a medicament for the regulation of Body Mass Index (BMI), to treat anorexia, lack of appetite in children with a growth hormone deficiency, obesity, Type 11 diabetes and wasting associated with AIDS for humans (all claimed) or other mammals, both domestic and wild. Also to treat wasting associated with chronic liver disease, chronic obstructive pulmonary disease, respiratory insufficiency in general, bone fractures or ageing.

ADVANTAGE - The medicament does not induce growth hormone release at the therapeutic dose of the compound, but stimulates feeding.

L131 ANSWER 10 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2001-529769 [58] WPIX
DOC. NO. CPI: C2001-157997 [58]
TITLE: 2,4-Diaminothiazole derivatives, useful as GSK-3 inhibitors for treating elevated blood glucose, hyperglycemia, impaired glucose tolerance, type 1 diabetes, type 2 diabetes, obesity, Alzheimer's disease and bipolar disorder
DERWENT CLASS: B03
INVENTOR: BOWLER A N; HANSEN B F; KURTZHALS P; OLESEN P H; SORENSEN A R; WORSAAE H
PATENT ASSIGNEE: (BOWL-I) BOWLER A N; (HANS-I) HANSEN B F; (KURT-I) KURTZHALS P; (NOVO-C) NOVO NORDISK AS; (OLES-I) OLESEN P H; (SORE-I) SORENSEN A R; (WORS-I) WORSAAE H
COUNTRY COUNT: 92

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001056567	A1	20010809	(200158)*	EN	94[0]	<--
US 20010039275	A1	20011108	(200171)	EN		<--
						<--
						<--

AU 2001030026 A 20010814 (200173) EN

<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001056567 A1		WO 2001-DK73 20010201	
US 20010039275 A1	Provisional	US 2000-183518P 20000218	
US 20010039275 A1		US 2001-774900 20010131	
AU 2001030026 A		AU 2001-30026 20010201	

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030026 A	Based on	WO 2001056567 A

PRIORITY APPLN. INFO: DK 2000-187 20000204

ED 20051007

AB WO 2001056567 A1 UPAB: 20051007

NOVELTY - Use of 2,4-diaminothiazole derivatives and their salts for the preparation of a composition for treating disorders by inhibition of GSK-3 is new.

DETAILED DESCRIPTION - Use of 2,4-diaminothiazole derivatives of formula (I) and their salts for the preparation of a composition for treating disorders by inhibition of GSK-3 is new.

A = a bond, 1-6C alkylene or CO;

B = a bond, CO, SO, SO₂ or optionally substituted oxime;

D = OH, halo, CN, NO₂, optionally substituted NH₂, optionally substituted CONH₂, optionally substituted alkoxy, optionally substituted optionally unsaturated 1-6C alkyl, optionally substituted (hetero)aryl or optionally substituted (hetero)cycloalkyl; and

E = optionally unsaturated, optionally substituted 1-6C alkyl, optionally esterified carboxylic acid or (hetero)aryl.

INDEPENDENT CLAIMS are also included for:

(1) use of (I) for preparing compositions for treating diseases associated with abnormal glycogen metabolism;

(2) use of (I) for preparing compositions for treating diseases involving elevated blood glucose;

(3) use of (I) for preparing compositions for treating hyperglycemia;

(4) use of (I) for preparing compositions for treating IGT;

(5) use of (I) for preparing compositions for treating diabetes;

(vi) use of (I) for preparing compositions for treating obesity;

(6) use of (I) for preparing compositions for treating Alzheimer's disease;

(7) use of (I) for preparing compositions for treating bipolar disorder;

(8) compounds of formula (Ia);

(9) compounds of formula (Ib);

(10) compounds of formula (Ic);

(11) compounds of formula (Id);

(12) method for treating diseases wherein inhibition of GSK-3 is beneficial comprising administration of (I).

A = 1-6C alkylene or CO.

With the provisos that:

(1) for compound (Ia):

(a) when V = X = Y = Z = =CH-, A = CH₂CH₂, B = CO, R₁ = H and D = 2-nitrophenyl then R₂ is not H or 4-Cl;
 (b) when V = X = Y = Z = =CH-, A = CH₂CH₂, B = CO, R₁ = H and D = 2-methoxyphenyl then R₂ is not 4-Cl;
 (c) when V = X = Y = Z = =CH-, A = CH₂, B = CO, R₁ = H and R₂ = 4-methoxy then D is not 5-chlorobenzofuran-2-yl or 2,5-dimethylthiophen-3-yl; and
 (d) when V = X = Y = Z = =CH-, A = CH₂, B = CO and R₁ = R₂ = H then D is not Me;

(2) for compound (Ib):
 (a) when R₁ = R₂ = H and B = CO then D is not Me, Et, cyclopropyl, MeO, EtO or NH₂;
 (b) when R₁ = H, R₂ = 4-dimethylamino and B = CO then D is not EtO, tert-BuO, benzyloxy, 3-methylbenzothiophen-2-yl or 3-methyl-6-chlorobenzothiophen-2-yl;
 (c) when R₁ = H, R₂ = 4-aminosulfonyl and B = CO then D is not 3-methylbenzothiophen-2-yl
 (d) when R₁ = H, R₂ = 4-chloro and B = CO then D is not Me;
 (e) when R₁ = H, R₂ = 3-methoxycarbonyl and B = CO then D is not naphthyl; and
 (f) when R₁ = R₂ = H and B = a bond than D is not CN;

(3) for compound (Ic):
 (a) one or two of X, Y, V or Z are =N- and the others are =C-; and
 (b) when R₁ = R₂ = H, B = CO, X, Y, V = =CH- and Z = =N- then D is not phenyl, 2-nitrophenyl, 2,4-dimethylphenyl, 2,4-dichlorophenyl, 2-methoxyphenyl or naphthyl; and

(4) for compound (Id), E = 1-6C alkyl, 2-6C alkenyl, 2-6C alkynyl, 1-6C alkylthio, 1-6C alkoxy, 1-6C alkanoyloxy, COOH or COO-(1-6C alkyl).

ACTIVITY - Antidiabetic; anorectic; nootropic; neuroprotective.

MECHANISM OF ACTION - GSK-3 inhibition. (I) showed IC₅₀ values of less than 5 microM.

USE - (I) are useful for treating diseases by inhibition of GSK-3, especially where growth factor induced inhibition of GSK-3 is insufficient. (I) are also useful for treating diseases characterised by abnormal glycogen metabolism, especially where glycogen synthase is insufficiently activated. (I) are further useful for treating diseases involving elevated blood glucose, hyperglycemia, impaired glucose tolerance, type 1 diabetes, type 2 diabetes, obesity, Alzheimer's disease and bipolar disorder.

L131 ANSWER 11 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2001-308015 [32] WPIX
 DOC. NO. CPI: C2001-095109 [32]
 TITLE: New heterocyclyl carboxylic acid derivatives are protein tyrosine phosphatase inhibitors used for treating e.g. diabetes, obesity, impaired glucose tolerance and insulin resistance
 DERWENT CLASS: B02
 INVENTOR: ANDERSEN H S; AXE F U; GE Y; HANSEN T K; HOLSWORTH D D; JONES T K; JUDGE L M; LAU J; M LLER N P H; MOLLER N P H; OLSEN O H; RIPKA W C; SHAPIRA B Z; UYEDA R T
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (ONTO-N) ONTOGEN CORP
 COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001019831	A1	20010322	(200132)*	EN	143[0]	<--
AU 2000069853	A	20010417	(200140)	EN		<--
EP 1214325	A1	20020619	(200240)	EN		<--
JP 2003509430	W	20030311	(200319)	JA	235	
EP 1214325	B1	20051109	(200574)	EN		
DE 60023923	E	20051215	(200582)	DE		
US 7019026	B1	20060328	(200623)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001019831	A1	WO 2000-DK503	20000911
AU 2000069853	A	AU 2000-69853	20000911
DE 60023923	E	DE 2000-623923	20000911
EP 1214325	A1	EP 2000-958277	20000911
EP 1214325	B1	EP 2000-958277	20000911
DE 60023923	E	EP 2000-958277	20000911
EP 1214325	A1	WO 2000-DK503	20000911
JP 2003509430	W	WO 2000-DK503	20000911
EP 1214325	B1	WO 2000-DK503	20000911
DE 60023923	E	WO 2000-DK503	20000911
JP 2003509430	W	JP 2001-523408	20000911
US 7019026	B1 Provisional	US 1999-156586P	19990929
US 7019026	B1	US 2000-662457	20000911

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 60023923	E	Based on EP 1214325 A
AU 2000069853	A	Based on WO 2001019831 A
EP 1214325	A1	Based on WO 2001019831 A
JP 2003509430	W	Based on WO 2001019831 A
EP 1214325	B1	Based on WO 2001019831 A
DE 60023923	E	Based on WO 2001019831 A

PRIORITY APPLN. INFO: DK 1999-1278 19990910

ED 20050525

AB WO 2001019831 A1 UPAB: 20060202

NOVELTY - Heterocyclyl carboxylic acid derivatives (I) are new.

DETAILED DESCRIPTION - Heterocyclyl carboxylic acid derivatives of formula (I) and their salts with acid or base, their optical isomers, racemic mixtures, tautomers and prodrugs, are new.

n = 0-2;

m = 1 or 2;

X = S or O;

Y = O, S, SO or SO₂;R1 = H, COOR₃ or a group of formula (i)-(xvi);R2 = H, 1-6C alkyl, OH or NR₇R₈;

R3 = H, 1-6C alkyl, aryl 1-6C alkyl, 1-6C alkylcarbonyloxy 1-6C alkyl or 1-6C alkylcarbonyloxyaryl 1-6C aryl;

R4-R6 = H, trihalomethyl, 1-6C alkyl, aryl, aryl 1-6C alkyl, OH,

oxo, COOH, carboxy- 1-6C alkyl, 1-6C alkoxy, 1-6C alkoxy 1-6C alkyl, aryloxy, aryl 1-6C alkoxy, aryloxy 1-6C alkyl, aryl 1-6C alkoxy 1-6C alkyl, thio, 1-6C alkylthio, 1-6C alkylthio 1-6C alkyl, arylthio, aryl 1-6C alkylthio, aryl 1-6C alkylthio 1-6C alkyl, NR8R9, 1-6C alkylamino 1-6C alkyl, aryl 1-6C alkylamino 1-6C alkyl, di(aryl 1-6C alkyl)amino 1-6C alkyl, 1-6C alkylcarbonyl, 1-6C alkylcarbonyl 1-6C alkyl, aryl 1-6C alkylcarbonyl, aryl 1-6C alkylcarbonyl 1-6C alkyl, 1-6C alkylcarboxy, 1-6C alkylcarboxy 1-6C alkyl, arylcarboxy 1-6C alkyl, aryl 1-6C alkylcarboxy, aryl 1-6C alkylcarboxy 1-6C alkyl, 1-6C alkylcarbonylamino, 1-6C alkylcarbonylamino 1-6C alkyl, carbonyl NR8 1-6C alkylCOR11, aryl 1-6C alkylcarbonylamino, aryl 1-6C alkylcarbonylamino 1-6C alkyl, CONR7R8, 1-6C alkylCONR7R8 or arylaminocarbonylamino 1-6C alkyl (in which alkyl is optionally substituted by Q and aryl is optionally substituted by QA);

R11 = NR7R8 or 1-6C alkylNR7R8;

R7, R8 = H, 1-6C alkyl, aryl, aryl 1-6C alkyl, 1-6C alkylcarbonyl, arylcarbonyl, aryl 1-6C alkyl carbonyl, 1-6C alkylcarboxy or aryl 1-6C alkylcarboxy (in which alkyl and aryl are all optionally substituted), or saturated or partially saturated cyclic 5-7 membered amine, imide or lactam, or

NR7R8 = mono-, bi- or tri-cyclic ring system containing 3-14C atoms and 0-3 N, O or S heteroatoms and optionally substituted by at least one 1-6C alkyl, aryl, aryl 1-6C alkyl, OH, oxo, 1-6C alkoxy, aryl 1-6C alkoxy, 1-6C alkoxy 1-6C alkyl, 1-6C alkylamino 1-6C alkyl or NR9R10;

R9, R10 = H, 1-6C alkyl, aryl, aryl 1-6C alkyl, 1-6C alkylcarbonyl, arylcarbonyl, aryl 1-6C alkylcarbonyl, 1-6C alkylcarboxy or 1-6C alkylcarboxy (in which the alkyl and aryl are optionally substituted);

Q = halo, CN, NO₂, trihalomethyl, carbamoyl, OH, oxo, COOR₃, CONR7R8, 1-6C alkoxy, aryloxy, aryl 1-6C alkoxy, thio, 1-6C alkylthio, arylthio, aryl 1-6C alkylthio, NR7R8, 1-6C alkylamino, arylamino, aryl 1-6C alkylamino, di-(aryl 1-6C alkyl)amino, 1-6C alkylcarbonyl, aryl 1-6C alkylcarbonyl, 1-6C alkylcarboxy, arylcarboxy, aryl 1-6C alkylcarboxy, 1-6C alkylcarbonylamino, 1-6C alkylaminocOR12, aryl 1-6C alkylcarbonylamino, tetrahydrofuryl, morpholinyl, piperazinyl, CONR7R8, 1-6C alkylCONR7R8 or 5-7 membered amine, imide or lactam, and

QA = halo, CN, NO₂, trihalomethyl, 1-6C alkyl, aryl, aryl 1-6C alkyl, OH, COOR₃, CONR7R8, 1-6C alkoxy, 1-6C alkoxy 1-6C alkyl, aryloxy, aryl 1-6C alkoxy, aryl 1-6C alkoxy 1-6C alkyl, thio, 1-6C alkylthio 1-6C alkyl, arylthio, aryl 1-6C alkylthio, aryl 1-6C alkylthio 1-6C alkyl, NR7R8, 1-6C alkylamino, 1-6C alkylamino 1-6C alkyl, arylamino, aryl 1-6C alkylamino, aryl 1-6C alkylamino 1-6C alkyl, di-(aryl 1-6C alkyl)amino 1-6C alkyl, 1-6C alkylcarbonyl, 1-6C alkylcarbonyl 1-6C alkyl, aryl 1-6C alkylcarbonyl, aryl 1-6C alkylcarbonyl 1-6C alkyl, 1-6C alkylcarboxy, 1-6C alkylcarboxy 1-6C alkyl, aryl 1-6C alkylcarboxy, aryl 1-6C alkylcarboxy 1-6C alkyl, carboxy 1-6C alkoxy, 1-6C alkylcarbonylamino, 1-6C alkylcarbonylamino 1-6C alkyl, carbonylNR71-6C alkylaminocOR12, aryl 1-6C alkylcarbo 1-6C alkylCOR11, aryl 1-6C alkylcarbonylamino, aryl 1-6C alkylcarbonylamino 1-6C alkyl, CONR7R8 or 1-6C alkyl CONR7R8.

INDEPENDENT CLAIMS are included for the following:

(1) preparation of (I) and

(2) a composition for treating type I and II diabetes, impaired glucose tolerance, insulin resistance and obesity which comprises (I) and an insulin sensitizer e.g. troglitazone, pioglitazone or rosiglitazone, an agent stimulating insulin release from beta cells e.g. repaglinide or an antiobesity agent e.g. orlistat.

ACTIVITY - Antidiabetic; anorectic; immunosuppressant; antiallergic; osteopathic; cytostatic; antipsoriatic; neuroprotective; nootropic; neuroleptic; antibacterial.

MECHANISM OF ACTION - Protein tyrosine phosphatase inhibitor.

In an assay for evaluating biological activity with a truncated form of PTP1B expressed in E. coli, 2-(oxallylamo)-7-(1,1,3-trioxo-1H-benzo(d)isothiazol-3-yloxomethyl)-4,7-dihydro-5H-thieno(2,3-c)pyran-3-carboxylic acid (Ia) exhibited a Ki value of 0.8 micro-M for inhibiting PTP1B.

USE - Used for treating type I and II diabetes, impaired glucose tolerance, insulin resistance, obesity, immune dysfunctions e.g. autoimmunity, diseases with dysfunctions of the coagulation system, allergic diseases, osteoporosis, proliferative disorders e.g. cancers and psoriasis, diseases with decreased or increased synthesis or effects of growth hormone, diseases with decreased or increased synthesis of hormones or cytokines that regulate the release of/or response to growth hormone, diseases of the brain e.g. Alzheimer's disease and schizophrenia, and infectious diseases.

L131 ANSWER 12 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2001-290353 [30] WPIX
 DOC. NO. CPI: C2001-088892 [30]
 TITLE: New thieno- or furano(2,3-c)tetrahydropyridine compounds are modulators of protein tyrosine phosphatases, for treating e.g. diabetes and obesity
 DERWENT CLASS: B02
 INVENTOR: ANDERSEN H; ANDERSEN H S; AXE F; AXE F U; GE Y;
HANSEN T; HANSEN T K; HOLSWORTH D;
 HOLSWORTH D D; JONES T; JONES T K; JUDGE L; JUDGE L M;
 LAU J; M LLER N P H; MOLLER N; MOLLER N P H; OLSEN O;
 OLSEN O H; RIPKA W; RIPKA W C; SHAPIRA B; SHAPIRA B Z;
 UYEDA R; UYEDA R T; ANDERSEN S; AXE U; HANSEN K; JONES K;
 JUDGE M; MOLLER P; OLSEN H; RIPKA C; SHAPIRA Z; UYEDA T
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (ONTO-N) ONTOGEN CORP
 COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001019830	A1	20010322	(200130)*	EN	150[0]	<--
AU 2000069852	A	20010417	(200140)	EN		<--
EP 1214324	A1	20020619	(200240)	EN		<--
US 6410556	B1	20020625	(200246)	EN		<--
JP 2003509429	W	20030311	(200319)	JA	237	<--
EP 1214324	B1	20060614	(200643)	EN		<--
DE 60028791	E	20060727	(200650)	DE		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001019830	A1	WO 2000-DK502	20000911
US 6410556	B1 Provisional	US 1999-156742P	19990930
AU 2000069852	A	AU 2000-69852	20000911
EP 1214324	A1	EP 2000-958276	20000911
EP 1214324	B1	EP 2000-958276	20000911

US 6410556 B1	US 2000-659547 20000911
EP 1214324 A1	WO 2000-DK502 20000911
JP 2003509429 W	WO 2000-DK502 20000911
EP 1214324 B1	WO 2000-DK502 20000911
JP 2003509429 W	JP 2001-523407 20000911
DE 60028791 E	DE 2000-628791 20000911
DE 60028791 E	EP 2000-958276 20000911
DE 60028791 E	WO 2000-DK502 20000911

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000069852	A	Based on
EP 1214324	A1	Based on
JP 2003509429	W	Based on
EP 1214324	B1	Based on
DE 60028791	E	Based on
DE 60028791	E	Based on
		WO 2001019830 A
		EP 1214324 A
		WO 2001019830 A

PRIORITY APPLN. INFO: DK 2000-1069 20000707
DK 1999-1277 19990910

ED 20050525

AB WO 2001019830 A1 UPAB: 20050525

NOVELTY - Bicyclic compounds (I) are new.

DETAILED DESCRIPTION - Bicyclic compounds of formula (I), their acid and base salts, optical isomers and tautomers, are new.

n = 0-2;
m = 1-2;
X = S or O;
R1 = H, COOR3 or a group of formula (i)-(xvi);
R2 = H, OH, 1-6C alkyl or NR8R9;
R3 = H, 1-6C alkyl, aryl-1-6C alkyl, 1-6C alkylcarbonyloxy-1-6C alkyl or 1-6C alkylcarbonyloxyaryl-1-6C alkyl;
R4 - R6 = H, trihalomethyl, 1-6C alkyl, aryl, aryl-1-6C alkyl, OH, oxo, carboxy, carboxy-1-6C alkyl, 1-6C alkyloxy-carbonyl, aryloxycarbonyl, aryl-1-6C alkyloxycarbonyl, 1-6C alkyloxy, 1-6C alkyloxy-1-6C alkyl, aryloxy, aryl-1-6C alkyloxy, aryl-1-6C alkyloxy-1-6C alkyl, thio, 1-6C alkylthio, 1-6C alkylthio-1-6C alkyl, arylthio, aryl-1-6C alkylthio, aryl-1-6C alkylthio-1-6C alkyl, NR8R9, 1-6C alkylamino-1-6C alkyl, aryl-1-6C alkylamino-1-6C alkyl, di(aryl-1-6C alkyl)amino-1-6C alkyl, 1-6C alkylcarbonyl, 1-6C alkylcarbonyl-1-6C alkyl, aryl-1-6C alkylcarbonyl, aryl-1-6C alkylcarbonyl-1-6C alkyl, 1-6C alkylcarboxy, 1-6C alkylcarboxy-1-6C alkyl, arylcarboxy, arylcarboxy-1-6C alkyl, aryl-1-6C alkylcarboxy, aryl-1-6C alkylcarboxy-1-6C alkyl, 1-6C alkylcarbonylamino, 1-6C alkylcarbonylamino-1-6C alkyl, carbonylNR8-1-6C alkyl-COR12, aryl-1-6C alkylcarbonylamino, aryl-1-6C alkylcarbonylamino-1-6C alkyl, CONR8R9 or 1-6C alkyl-CONR8R9 (alkyl and aryl groups all optionally substituted);

R12 = NR8R9 or 1-6C alkyl-NR8R9;

R7 = H, 1-6C alkyl, aryl, aryl-1-6C alkyl, 1-6C alkylcarbonyl, 1-6C alkyloxocarbonyl, arylcarbonyl, aryloxocarbonyl, aryl-1-6C alkylcarbonyl, aryl-1-6C alkyloxocarbonyl, 1-6C alkylcarboxy, aryl-1-6C alkylcarboxy, R10R11N-carbonyl-1-6C alkyl;

R10, R11 = H, 1-6C alkyl, aryl, aryl-1-6C alkyl, 1-6C alkylcarbonyl, arylcarbonyl, aryl-1-6C alkylcarbonyl, 1-6C alkylcarboxy or aryl-1-6C alkylcarboxy (all aryl and alkyl groups optionally substituted);

R8, R9 = H, 1-6C alkyl, aryl, aryl-1-6C alkyl, 1-6C alkylcarbonyl, 1-6C alkyloxocarbonyl, arylcarbonyl, aryloxocarbonyl, aryl-1-6C alkylcarbonyl, aryl-1-6C alkyloxocarbonyl, 1-6C alkylcarboxy, aryl-1-6C alkylcarboxy, R10R11N-carbonyl-1-6C alkyl (all aryl and alkyl groups optionally substituted); or

NR8R9 = saturated, partially saturated or aromatic mono-, bi- or tricyclic ring system with 3-14 C and 0-3 N, O or S (ring system optionally substituted by at least one 1-6C alkyl, aryl, aryl-1-6C alkyl, OH, oxo, 1-6C alkyloxy, aryl-1-6C alkyloxy, 1-6C alkyloxy-1-6C alkyl, NR10R11 or 1-6C alkylamino-1-6C alkyl), or saturated or partially saturated cyclic 5-7 membered amide, imide or lactam.

INDEPENDENT CLAIMS are also included for:

(1) preparations of (I);
 (2) pharmaceutical composition comprising (I), a carrier, and an insulin sensitizer e.g. troglitazone, ciglitazone, pioglitazone, rosiglitazone, 5-((4-(3-methyl-4-oxo-3,4-dihydro-2-quinazolinyl)methoxy)phenylmethyl)thiazolidine-2,4-dione (preferably as potassium salt) or (-) 3-(4-(2-phenoxy-10-yl)ethoxy)phenyl)-2-ethoxypropanoic acid (preferably as arginine salt) for treating diabetes, insulin resistance, impaired glucose tolerance and obesity;

(3) pharmaceutical composition comprising (I), a carrier and an agent e.g. repaglinide for stimulating insulin release from beta cells for treating diabetes, insulin resistance, impaired glucose tolerance and obesity; and

(4) pharmaceutical composition comprising (I), a carrier and an antiobesity agent e.g. orlistat for treating diabetes, insulin resistance, impaired glucose tolerance and obesity.

ACTIVITY - Antidiabetic; anorectic; immunomodulator; immunosuppressant; anticoagulant; vasotropic; cytostatic; antipsoriatic; dermatological; antiallergic; osteopathic; cerebroprotective; neuroprotective; nootropic; neuroleptic; antibacterial.

MECHANISM OF ACTION - Protein tyrosine phosphatase (PTP) inhibitor. Inhibition of classical PTP1B by 7-(S)-((acetyl-(4-phenoxybenzyl)amino)methyl)-2-(oxalamino)-4,5,6,7-tetrahydrothieno(2,3-c)pyridine-3-carboxylic acid (Ib) gave a Ki of 220 nM.

USE - (I) are useful for treatment of type I and type II diabetes, impaired glucose tolerance, insulin resistance, obesity, autoimmunity, dysfunctions of the coagulation system; allergic diseases, osteoporosis, cancer, psoriasis, diseases with increased or decreased synthesis or effects of growth hormones or cytokines, brain diseases including Alzheimer's disease and schizophrenia, and infectious diseases (all claimed).

L131 ANSWER 13 OF 22	WPIX COPYRIGHT 2006	THE THOMSON CORP on STN
ACCESSION NUMBER:	2001-316006 [33]	WPIX
DOC. NO. CPI:	C2001-097254 [33]	
TITLE:	Inhibiting intracellular or membrane associated protein tyrosine phosphatase used for treating e.g. diabetes and obesity by using inhibitor compound fitting spatially into active site	
DERWENT CLASS:	B02	
INVENTOR:	ANDERSEN H S; AXE F U; GE Y; <u>HANSEN T K</u> ; HOLSWORTH D D; IVERSON L F; JONES T K; JUDGE L M; LAU J; M LLER N P H; MOLLER N P H; OLSEN O H; RIPKA W C; SHAPIRA B Z; UYEDA R T; IVERSEN L F	
PATENT ASSIGNEE:	(NOVO-C) <u>NOVO NORDISK AS</u> ; (ONTO-N) ONTOGEN CORP	
COUNTRY COUNT:	92	

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001017516	A2	20010315	(200133)*	EN	644 [4]	<--
AU 2000074768	A	20010410	(200137)	EN		<--
EP 1214060	A2	20020619	(200240)	EN		<--
US 7115624	B1	20061003	(200665)	EN		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001017516	A2	WO 2000-US24761	20000911
AU 2000074768	A	AU 2000-74768	20000911
EP 1214060	A2	EP 2000-963340	20000911
EP 1214060	A2	WO 2000-US24761	20000911
US 7115624	B1 Provisional	US 1999-156641P	19990929
US 7115624	B1	US 2000-659622	20000911

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000074768	A	Based on WO 2001017516 A
EP 1214060	A2	Based on WO 2001017516 A

PRIORITY APPLN. INFO: US 1999-156641P 19990929
DK 1999-1279 19990910

ED 20050525

AB WO 2001017516 A2 UPAB: 20050525

NOVELTY - Inhibiting intracellular or membrane associated protein tyrosine phosphatase (PTPase) having aspartic acid (Asp) in position 48 using the numbering for PTP1B, comprises exposing the PTPase to an inhibitor compound fitting spatially into active site or its vicinity.

DETAILED DESCRIPTION - Inhibiting intracellular or membrane associated protein tyrosine phosphatase (PTPase) having aspartic acid (Asp) in position 48 using the numbering for PTP1B, comprises exposing the PTPase to an inhibitor compound (I) fitting spatially into active site or its vicinity.

(I) Comprises:

(1) a phosphate isostere forming a salt bridge to the guanidinium group of arginine 221 and a hydrogen bond with a H atom donated by the backbone amide nitrogens of arginine 221 and glycine 220 so that the distance between the centroid of the phosphate isostere group and (a) the centroid of the guanidinium group is 3.50-4.20Angstrom, (b) the arginine 221 backbone amide N is 3.5-4.2Angstrom and (c) the glycine 220 backbone amide N is 2.7-3.5Angstrom, and

(2) a carboxylic acid or carboxylic acid isostere group of formula (i)-(xvi) which forms a salt bridge to the side chain amino group lysine 120, where the distance between the centroid of the carboxylic acid or carboxylic acid isostere and the side chain N atom of the lysine 120 is 3.4-4.1Angstrom, and

(3) a hydrophobic group that interacts with the aromatic ring of

tyrosine 46 so that the distance between the centroid of the hydrophobic group and the centroid of the aromatic ring of the tyrosine 46 is 4.4-5.1Angstrom, and

(4) a hydrophobic group that interacts with the aromatic ring of phenylalanine 182 so that the distance between the centroid of the hydrophobic group and the centroid of the aromatic ring of phenylalanine 182 is 4.4-5.1Angstrom and/or

(5) a hydrophobic group that interacts with the imidazole ring of histidine 182 so that the distance between the centroid of the hydrophobic group and the centroid of the aromatic ring of histidine 182 is 4.4-6.5Angstrom, and at least one of 31 specified groups e.g.

(6) a amino group which forms a salt bridge to the site chain carboxylic acid group of aspartic acid 48 so that the distance between the N atom of the amino group and the centroid of the site chain carboxylic acid group of aspartic acid 48 is 3.4-4.1Angstrom, and

(7) 2 oxygen atoms which form H bonds via a water molecule to the side chain carboxylic group of aspartic acid 48 so that the distance between each O atom and the centroid of the water molecule is 2.5-3.6Angstrom and the distance between the water molecule and the centroid of the side chain carboxylic acid group of the aspartic acid is 2.5-3.6Angstrom and the distance between the 2 O atoms is 2.5-3.0Angstrom.

See DEFINITIONS for 'Full definitions'.

ACTIVITY - Immunosuppressive; antiinflammatory; osteopathic; cytostatic; antidiabetic; anorectic; antipsoriatic; neuroprotective; nootropic; neuroleptic; antibacterial; antiallergic.

MECHANISM OF ACTION - PTPase inhibitor; T-cell PTPase inhibitor; PTPaselB inhibitor.

Tests are described, but no results are given.

USE - Used for treating autoimmune diseases, acute and chronic inflammation, osteoporosis, cancer and malignant diseases, type I and II diabetes, obesity, impaired glucose tolerance, insulin resistance, coagulation system diseases, allergic diseases, osteoporosis, psoriasis, diseases with decreased or increased synthesis or effects of growth hormone, diseases with decreased synthesis of hormones or cytokines that regulate the release of/or response to growth hormone, brain diseases e.g. Alzheimer's disease and schizophrenia and infectious diseases.

L131 ANSWER 14 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2000-160763 [14] WPIX

DOC. NO. CPI: C2000-050218 [14]

TITLE: New peptide compounds for stimulating the release of growth hormone from the pituitary gland, useful for treating osteoporosis and growth retardation

DERWENT CLASS: B05

INVENTOR: ANKERSEN M; HANSEN T K; KRUSE T; KRUSE T H; PESCHKE B; PSCHKE B R; RICHTER B; RICHTER L; RICHTER S; RICHTER S L; STEFAN L

PATENT ASSIGNEE: (ANKE-I) ANKERSEN M; (KRUS-I) KRUSE T
; (NOVO-C) NOVO NORDISK AS; (NOVO-C)
NOVO-NORDISK AS; (PESC-I) PESCHKE B; (RICH-I)
RICHTER B; (RICH-I) RICHTER L

COUNTRY COUNT: 86

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
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WO 2000001726	A1	20000113	(200014)*	EN	133[0]	<--
AU 9946038	A	20000124	(200027)	EN		<--
NO 2000006699	A	20010228	(200121)	NO		<--
BR 9911756	A	20010403	(200128)	PT		<--
EP 1100824	A1	20010523	(200130)	EN		<--
CZ 2000004565	A3	20010613	(200138)	CS		<--
CN 1307588	A	20010808	(200173)	ZH		<--
KR 2001053310	A	20010625	(200173)	KO		<--
HU 2001002460	A2	20011128	(200209)	HU		<--
ZA 2000007056	A	20020130	(200217)	EN	145	<--
JP 2002519436	W	20020702	(200246)	JA	158	<--
MX 2000012489	A1	20020401	(200363)	ES		<--
AU 771644	B2	20040401	(200455)	EN		
TW 593337	A	20040621	(200506)	ZH		
US 6919315	B1	20050719	(200547)	EN		
US 20050233981	A1	20051020	(200569)	EN		
IN 2000000849	P4	20050304	(200572)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000001726	A1	WO 1999-DK368	19990629
US 6919315	B1 Provisional	US 1998-91786P	19980706
US 20050233981	A1 Provisional	US 1998-91786P	19980706
US 6919315	B1 Provisional	US 1998-108369P	19981113
US 20050233981	A1 Provisional	US 1998-108369P	19981113
US 6919315	B1 CIP of	US 1999-337809	19990621
US 20050233981	A1 CIP of	US 1999-337809	19990621
AU 9946038	A	AU 1999-46038	19990629
AU 771644	B2	AU 1999-46038	19990629
BR 9911756	A	BR 1999-11756	19990629
CN 1307588	A	CN 1999-808086	19990629
EP 1100824	A1	EP 1999-929114	19990629
NO 2000006699	A	WO 1999-DK368	19990629
BR 9911756	A	WO 1999-DK368	19990629
EP 1100824	A1	WO 1999-DK368	19990629
CZ 2000004565	A3	WO 1999-DK368	19990629
HU 2001002460	A2	WO 1999-DK368	19990629
JP 2002519436	W	WO 1999-DK368	19990629
MX 2000012489	A1	WO 1999-DK368	19990629
IN 2000000849	P4	WO 1999-DK368	19990629
US 6919315	B1	US 1999-356313	19990716
US 20050233981	A1 Cont of	US 1999-356313	19990716
TW 593337	A	TW 1999-114089	19990818
CZ 2000004565	A3	CZ 2000-4565	19990629

JP 2002519436 W
 ZA 2000007056 A
 MX 2000012489 A1
 IN 2000000849 P4
 KR 2001053310 A
 NO 2000006699 A
 HU 2001002460 A2
 US 20050233981 A1

JP 2000-558127 19990629
ZA 2000-7056 20001130
MX 2000-12489 20001214
IN 2000-CN849 20001219
KR 2000-715040 20001229
NO 2000-6699 20001229
HU 2001-2460 19990629
 US 2005-147017 20050607

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 771644 B2	Previous Publ	AU 9946038 A
US 20050233981 A1	Cont of	US 6919315 B
AU 9946038 A	Based on	WO 2000001726 A
BR 9911756 A	Based on	WO 2000001726 A
EP 1100824 A1	Based on	WO 2000001726 A
CZ 2000004565 A3	Based on	WO 2000001726 A
HU 2001002460 A2	Based on	WO 2000001726 A
JP 2002519436 W	Based on	WO 2000001726 A
MX 2000012489 A1	Based on	WO 2000001726 A
AU 771644 B2	Based on	WO 2000001726 A

PRIORITY APPLN. INFO: DK 1998-1440 19981109
DK 1998-857 19980630

ED 20050410

AB WO 2000001726 A1 UPAB: 20060116

NOVELTY - Peptide compounds (I) are new.

DETAILED DESCRIPTION - Peptide compounds of formula (I) and their salts are new.

R1, R2 = H or 1-6C alkyl;
 L = a group of formula (a) or (b);
 R4 = H or 1-6C alkyl;
 Q1 = (CH₂)_p;
 Q2 = (CH₂)_q;
 Q3 = (CR₉R₁₀)_r;
 Q4 = (CH₂)_s;
 Q5 = (CH₂)_t;
 Q6 = (CH₂)_u;
 p = 0 or 1;
 q, s, t, u = 0-4;
 r = 0 or 1;
 q + r + s + t + u = 0-4;
 R9-R12 = H or 1-6C alkyl;
 Q = NR₁₃ or CR₁₄-(CH₂)_o-T;
 o = 0-2;
 T = NR₁₅R₁₆ or OH;
 R13, R15, R16 = H or 1-6C alkyl;
 R14 = H, aryl or hetaryl;
 G = O-(CH₂)_k-R17 or a group of formula (c)-(h);
 X1 = NH or S;
 R17-R21 = H, halo, aryl, hetaryl, 1-6C alkyl or 1-6C alkoxy;
 k = 0-2;
 J = O-(CH₂)_l-R22 or a group of formula (j)-(o);
 R22-R26 = H, halo, aryl, hetaryl, 1-6C alkyl or 1-6C alkoxy;
 l = 0-2;

a,b,c = 0-2;
 d = 0 or 1;
 e = 0-3;
 f = 0 or 1;
 R5 = H or 1-6C alkyl (optionally substituted by OH, aryl and/or hetaryl);
 R6, R7 = H or 1-6C alkyl (optionally substituted by halo, amino, OH, aryl and/or hetaryl);
 R8 = H or 1-6C alkyl (optionally substituted by halo, amino, OH, aryl and/or hetaryl);
 R6+R7 or R6+R8 or R7+R8 = (CH₂)_iU(CH₂)_j;
 i, j = 1-3;
 U = O, S or bond;
 M = arylene, hetarylene, O, S or CR27=CR28;
 R27, R28 = H or 1-6C alkyl (optionally substituted by aryl and/or hetaryl).

An INDEPENDENT CLAIM is included for the use of a growth hormone secretagogue or its salt for the preparation of a medicament for the treatment of growth retardation in connection with asthma, or in connection with juvenile rheumatic arthritis or systemic fibrosis.

ACTIVITY - Endocrine-Gen.; Vulnerary; Osteopathic; Eating-Disorders-Gen., Muscular-Gen.; Immunomodulator; Cardiant; Hypotensive.

Activity tests are described but no results are given.

USE - (I) are useful for stimulating the release of growth hormone from the pituitary gland (claimed). (I) are useful for stimulation of growth hormone release in the elderly, prevention and treatment of osteoporosis, treatment of chronic fatigue syndrome, stimulation of the immune system, acceleration of wound healing, treatment of obesity and growth retardation associated with obesity, treatment of anorexia, treatment of cardiac failure, lowering blood pressure, reducing cachexia and protein loss due to chronic illness such as cancer or AIDS, treatment of metabolic homeostasis, treatment of insulin resistance, improvement of sleep quality, treatment of congestive heart failure and treatment of musculoskeletal impairment in the elderly.

ADVANTAGE - (I) have no or substantially no side-effects, such as e.g. release of LH, FSH, vasopressin, oxytocin and/or prolactin. (I) also have good oral bioavailability.

L131 ANSWER 15 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2000-116278 [10] WPIX
 DOC. NO. CPI: C2000-035427 [10]
 TITLE: Novel 4,4-disubstituted and 3,3-disubstituted piperidine compounds, used for treating medical disorders resulting from deficiency in growth hormone
 DERWENT CLASS: B02; B03
 INVENTOR: ANDERSEN M; ANKERSEN M; HANSEN T K; HENSEN T K
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C)
NOVO-NORDISK AS
 COUNTRY COUNT: 86

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 9958501	A1 19991118 (200010)*	EN	87[0]		<-- <--

AU 9937010	A	19991129 (200018)	EN	<--
BR 9910329	A	20010130 (200110)	PT	<--
EP 1077941	A1	20010228 (200113)	EN	<--
NO 2000005668	A	20010110 (200115)	NO	<--
CZ 2000004129	A3	20010613 (200138)	CS	<--
CN 1300281	A	20010620 (200159)	ZH	<--
US 6303620	B1	20011016 (200164)	EN	<--
KR 2001043422	A	20010525 (200168)	KO	<--
MX 2000010585	A1	20010401 (200171)	ES	<--
ZA 2000005820	A	20011128 (200202)	EN 93	<--
HU 2001002071	A2	20020328 (200234)	HU	<--
AU 757217	B	20030206 (200324)	EN	
JP 2004500312	W	20040108 (200410)	JA 154	
RU 2243215	C2	20041227 (200510)	RU	
NO 318080	B1	20050131 (200511)	NO	
TW 222969	B1	20041101 (200532)	ZH	
IN 2000000621	P4	20050304 (200547)	EN	
MX 223560	B	20041019 (200557)	ES	
CN 1142911	C	20040324 (200609)	ZH	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9958501	A1	<u>WO 1999-DK260</u>	<u>19990510</u>
US 6303620	B1	<u>US 1998-85886P</u>	<u>19980518</u>
US 6303620	B1	<u>US 1998-91947P</u>	<u>19980707</u>
IN 2000000621	P4	WO 1999-DK260	
US 6303620	B1	<u>US 1999-306151</u>	<u>19990506</u>
AU 9937010	A	<u>AU 1999-37010</u>	<u>19990510</u>
AU 757217	B	<u>AU 1999-37010</u>	<u>19990510</u>
BR 9910329	A	<u>BR 1999-10329</u>	<u>19990510</u>
CN 1300281	A	<u>CN 1999-806010</u>	<u>19990510</u>
EP 1077941	A1	<u>EP 1999-919125</u>	<u>19990510</u>
BR 9910329	A	<u>WO 1999-DK260</u>	<u>19990510</u>
EP 1077941	A1	<u>WO 1999-DK260</u>	<u>19990510</u>
NO 2000005668	A	<u>WO 1999-DK260</u>	<u>19990510</u>
CZ 2000004129	A3	<u>WO 1999-DK260</u>	<u>19990510</u>
HU 2001002071	A2	<u>WO 1999-DK260</u>	<u>19990510</u>
JP 2004500312	W	<u>WO 1999-DK260</u>	<u>19990510</u>
RU 2243215	C2	<u>WO 1999-DK260</u>	<u>19990510</u>
NO 318080	B1	<u>WO 1999-DK260</u>	<u>19990510</u>
MX 223560	B	<u>WO 1999-DK260</u>	<u>19990510</u>
TW 222969	B1	<u>TW 1999-108436</u>	<u>19990524</u>
CZ 2000004129	A3	<u>CZ 2000-4129</u>	<u>19990510</u>
JP 2004500312	W	<u>JP 2000-548305</u>	<u>19990510</u>
RU 2243215	C2	<u>RU 2000-131184</u>	<u>19990510</u>

ZA 2000005820 A
 MX 2000010585 A1
 MX 223560 B
 IN 2000000621 P4
 KR 2001043422 A
 NO 2000005668 A
 NO 318080 B1
 HU 2001002071 A2
 CN 1142911 C

ZA 2000-5820 20001019
MX 2000-10585 20001027
MX 2000-10585 20001027
IN 2000-CN621 20001108
KR 2000-712458 20001108
NO 2000-5668 20001110
NO 2000-5668 20001110
HU 2001-2071 19990510
CN 1999-806010 19990510

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 757217 B	Previous Publ	AU 9937010 A
NO 318080 B1	Previous Publ	NO 2000005668 A
AU 9937010 A	Based on	WO 9958501 A
BR 9910329 A	Based on	WO 9958501 A
EP 1077941 A1	Based on	WO 9958501 A
CZ 2000004129 A3	Based on	WO 9958501 A
HU 2001002071 A2	Based on	WO 9958501 A
AU 757217 B	Based on	WO 9958501 A
JP 2004500312 W	Based on	WO 9958501 A
RU 2243215 C2	Based on	WO 9958501 A
MX 223560 B	Based on	WO 9958501 A

PRIORITY APPLN. INFO: DK 1998-875 19980701
DK 1998-636 19980511

ED 20050705

AB WO 1999058501 A1 UPAB: 20060206

NOVELTY - 4,4-Disubstituted and 3,3-disubstituted piperidine compounds (I) or their salts are novel.

DETAILED DESCRIPTION - 4,4-Disubstituted and 3,3-disubstituted piperidine compounds of formula (I) are novel.

R1 = H or 1-6C alkyl optionally substituted with (hetero)aryl group(s);

a, d = 0-3;

b, c = 0-5 and b+c = 3-5;

D' = (CH₂)_h(CHR₅)gM(CH₂)f(CR₃R₄)eNHR₂;

R₂-R₅ = H or 1-6C alkyl optionally substituted with halogen, amino, hydroxyl, or (hetero)aryl group(s); R₂ and R₃, R₂ and R₄ or R₃ and R₄ optionally form -(CH₂)_iU(CH₂)_j;

i, j = 1 or 2;

U = O, S or valence bond;

h, f = 0-3;

g, e = 0 or 1;

M = valence bond, (hetero)arylene, O, S or -CR₆=CR₇;

R₆, R₇ = H or 1-6C alkyl optionally substituted with (hetero)aryl group(s);

G = O(CH₂)_kR₈;

J = O(CH₂)_lR₁₃;

R₈, R₁₃ = phenyl, pyridyl, naphthyl, pyrrole, furyl, indoyl, imidazolyl or (benzo)thiophenyl group (optionally substituted with halogen, (hetero)aryl, 1-6C alkyl or 1-6C alkoxy);

E = CONR₁₈R₁₉, COOR₁₉, (CH₂)_mNR₁₈SO₂R₂₀, (CH₂)_mNR₁₈COR₂₀, (CH₂)_mOR₁₉, (CH₂)_mOCOR₂₀, CHR₁₈R₁₉, (CH₂)_mNR₁₈C(S)NR₁₉R₂₁, (CH₂)_mNR₁₈CONR₁₉R₂₁, CONR₂₂R₂₃R₂₄;

R18, R21 = H or 1-6C alkyl optionally substituted with halogen or NR25R26;
R25, R26 = H, hydroxy, aryl, (1-6C) alkyl, alkoxy or (alkoxycarbonyl)oxy;
R19 = same as R18 or group (q);
Q = CH or N;
K', L = CH₂, CO, O, S, NR27 or valence bond;
R27 = H or 1-6C alkyl;
n, o = 0-4;
R20 = (hetero)aryl or 1-6C alkyl;
R22, R24 = H, 1-6C alkyl optionally substituted with (hetero)aryl group(s), or (hetero)aryl optionally substituted with 1-6C alkyl group(s);
R23 = 1-6C alkyl optionally substituted with (hetero)aryl or 1-7C acyl group(s); R22 and R23, R22 and R24 or R23 and R24 together with nitrogen atom to which they are attached may form a heterocyclic system optionally substituted with 1-6C alkyl, halogen, amino, hydroxy or (hetero)aryl group(s); and
m = 0-3.

If M = valence bond then E = CONR22NR23R24.

ACTIVITY - Antiinflammatory; anti-HIV; vulnerary; immunomodulator; cytostatic; cardiant; antidepressant; antidiabetic; nootropic.

MECHANISM OF ACTION - Compound (I) stimulates the release of growth hormone from pituitary. Test details are described but no results are given.

USE - For stimulating release of growth hormone from pituitary, prevention of catabolic side effects, prevention and/or treatment of osteoporosis, chronic fatigue syndrome (CFS), acute fatigue syndrome and muscle loss following election surgery, stimulating immune system, accelerating wound healing, accelerating bone and complicated fractures, treatment of growth retardation resulting from renal failure or insufficiency, cardiomyopathy, chronic liver disease, thrombocytopenia, Crohn's disease, short bowel syndrome, chronic obstructive pulmonary disease (COPD), anorexia, growth retardation associated with the Prader-Willi syndrome and Turner's syndrome, intrauterine growth retardation, skeletal dysplasia, hypercortisolism and Cushing's syndrome, osteochondrodysplasias, Noonan's syndrome, schizophrenia, depressions, Alzheimer's disease, myocardial infarction, lowering blood pressure, protection against ventricular dysfunction, attenuation of protein catabolic responses after major surgery, reducing cachexia and protein loss due to chronic illness such as cancer or AIDS, treatment of hyperinsulinemia, adjuvant treatment for ovulation induction, to stimulate thymic development and prevent the age-related decline of thymic function, improvement in muscle strength, mobility, maintenance of skin thickness, treatment of metabolic syndrome (syndrome X), treatment of insulin resistance.

ADVANTAGE - The compounds are highly specific and selective therefore, they have no side effects. The compound is resistance to proteolytic degradation by enzymes therefore, the compounds have good oral bioavailability.

L131 ANSWER 16 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1999-539565 [45] WPIX
DOC. NO. CPI: C1999-157602 [45]
TITLE: Altered nucleic acids encoding P85alpha subunits of human phosphatidylinositol 3-kinase, useful for identifying mutations that may be associated with impaired glucose transport and metabolism

DERWENT CLASS: B04; D16
 INVENTOR: ANDERSEN C B; HANSEN T; PEDERSEN O B
 PATENT ASSIGNEE: (NOVO-C) NOVO-NORDISK AS
 COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 5955277	A	19990921	(199945)*	EN	14 [0]	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5955277 A		<u>US 1997-850993</u>	<u>19970505</u>

PRIORITY APPLN. INFO: US 1997-850993 19970505

ED 20050522

AB US 5955277 A UPAB: 20050522

NOVELTY - Altered nucleic acids encoding P85alpha subunits of human phosphatidylinositol 3-kinase (P13K), are new. P13K binds to growth factor plasma membrane receptors (including insulin receptors) and signaling motifs in signaling proteins and modulates the activity of those molecules through tyrosine kinase activity. It is also associated with vesicle trafficking and protein sorting and therefore acts as a mediator of insulin action on glucose transport and metabolism.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(i) an isolated, mutated nucleic acid sequence (I) (or fragment of (I) comprising the mutation) encoding an altered P85alpha subunit of human phosphatidylinositol 3-kinase (P13K) (the defined 2508 base pair wild-type sequence (X) of P13K is given in the specification), which comprises the mutation(s) :

- (1) C to T at nucleotide 261 of (X) (MUT1);
- (2) T to G at nucleotide 663 of (X) (MUT2);
- (3) A to G at nucleotide 810 of (X) (MUT3); and/or
- (4) G to A at nucleotide 1020 of (X) (MUT4);
- (ii) a recombinant vector (II) comprising (I);
- (iii) a cell (III) comprising (II);
- (iv) a method (A) for detecting the presence of a mutation in a gene encoding a regulatory unit of P13K, comprising analyzing a sample containing nucleic acids obtained from a patient for the presence of (I);

(v) a diagnostic composition (IV), comprising (I) for detecting mutations in P13K regulatory subunits;

(vi) a test kit (V) for detecting the presence of mutations (MUT1, 2, 3 and/or 4) in genes encoding P85alpha subunits, comprising:

- (1) a restriction endonuclease which cleaves DNA at the site of the mutation;
- (2) a DNA sequence corresponding to part of the wild-type gene encoding P85alpha; and

- (3) an altered DNA sequence corresponding to part of a mutated gene encoding P85alpha which comprises MUT1, 2, 3 and/or 4; and

- (vii) a test kit (VI), comprising:

- (1) a means for amplifying DNA; and

- (2) a labeled oligonucleotide probe corresponding to part of a mutated gene encoding P85alpha which comprises MUT1, 2, 3 and/or 4.

USE - The nucleic acids may be used to detect mutated genes encoding the P85alpha subunit of PI3K and to identify mutations which may alter the activity of the polypeptide and result in a disease state. PI3K binds to growth factor plasma membrane receptors (including insulin receptors) and signaling motifs in signaling proteins and modulates the activity of those molecules through tyrosine kinase activity. It is associated with pinocytic activity, cytoskeletal rearrangements that accompany secretory processes, membrane ruffling, actin reorganization in KB (not defined) cells in response to insulin, protein sorting and in membrane and vesicle trafficking. Therefore, PI3K acts as a mediator of insulin action on glucose transport and metabolism. Mutations in the PI3K gene result in decreased glucose disappearance rates, decreased glucose effectiveness and decreased glucose sensitivity. Consequently, mutations in PI3K genes are associated with glucose resistance or (impaired glucose tolerance), non-insulin dependent diabetes mellitus (NIDDM), cardiovascular disease, obesity and hypertension and other diseases resulting from altered glucose metabolism.

L131 ANSWER 17 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1998-018054 [02] WPIX
 DOC. NO. CPI: C1998-006648 [02]
 TITLE: New cyclic di:amide derivatives having growth hormone releasing properties - are used to increase rate and extent of growth and to treat disease in both humans and animals, and to increase milk and wool production in animals
 DERWENT CLASS: B02; B03
 INVENTOR: ANDERSEN K E; HANSEN T K; PESCHE B; PESCHKE B
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C)
NOVO-NORDISK AS
 COUNTRY COUNT: 76

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 9740023	A1 19971030 (199802)*	EN	75[0]		<--
ZA 9703483	A 19971231 (199807)	EN	72[0]		<--
AU 9726345	A 19971112 (199811)	EN			<--
CZ 9803390	A3 19990113 (199908)	CS			<--
NO 9804950	A 19981221 (199909)	NO			<--
EP 907643	A1 19990414 (199919)	EN			<--
US 5919777	A 19990706 (199933)	EN			<--
CN 1216537	A 19990512 (199937)	ZH			<--
BR 9708854	A 19990803 (199952)	PT			<--
HU 9902668	A2 20000428 (200030)	HU			<--
JP 2000508666	W 20000711 (200038)	JA 73			<--

AU 722421	B 20000803 (200042)	EN	<--
MX 9808591	A1 19990901 (200067)	ES	<--
KR 2000010626	A 20000225 (200102)	KO	<--
NO 312242	B1 20020415 (200233)	NO	<--
EP 907643	B1 20030115 (200306)	EN	
DE 69718469	E 20030220 (200322)	DE	
IL 126235	A 20030212 (200336)	EN	
CZ 291982	B6 20030618 (200347)	CS	
MX 205492	B 20011213 (200362)	ES	<--
IN 9700813	I4 20050304 (200555)	EN	
CN 1127488	C 20031112 (200565)	ZH	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9740023	A1	WO 1997-DK186	19970424
US 5919777	A Provisional	US 1996-21944P	19960717
IN 9700813	I4	IN 1997-CH813	19970422
US 5919777	A	US 1997-842187	19970423
ZA 9703483	A	ZA 1997-3483	19970423
AU 9726345	A	AU 1997-26345	19970424
AU 722421	B	AU 1997-26345	19970424
BR 9708854	A	BR 1997-8854	19970424
CN 1216537	A	CN 1997-194057	19970424
CN 1127488	C	CN 1997-194057	19970424
DE 69718469	E	DE 1997-69718469	19970424
EP 907643	A1	EP 1997-918075	19970424
EP 907643	B1	EP 1997-918075	19970424
DE 69718469	E	EP 1997-918075	19970424
IL 126235	A	IL 1997-126235	19970424
JP 2000508666	W	JP 1997-537623	19970424
CZ 9803390	A3	WO 1997-DK186	19970424
NO 9804950	A	WO 1997-DK186	19970424
EP 907643	A1	WO 1997-DK186	19970424
BR 9708854	A	WO 1997-DK186	19970424
HU 9902668	A2	WO 1997-DK186	19970424
JP 2000508666	W	WO 1997-DK186	19970424
KR 2000010626	A	WO 1997-DK186	19970424
NO 312242	B1	WO 1997-DK186	19970424
EP 907643	B1	WO 1997-DK186	19970424
DE 69718469	E	WO 1997-DK186	19970424
CZ 291982	B6	WO 1997-DK186	19970424
MX 205492	B	WO 1997-DK186	19970424
CZ 9803390	A3	CZ 1998-3390	19970424
CZ 291982	B6	CZ 1998-3390	19970424
MX 9808591	A1	MX 1998-8591	19981016
MX 205492	B	MX 1998-8591	19981016
KR 2000010626	A	KR 1998-708527	19981023
NO 9804950	A	NO 1998-4950	19981023
NO 312242	B1	NO 1998-4950	19981023
HU 9902668	A2	HU 1999-2668	19970424

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 722421 B	Previous Publ	AU 9726345 A
CZ 291982 B6	Previous Publ	CZ 9803390 A
DE 69718469 E	Based on	EP 907643 A
NO 312242 B1	Previous Publ	NO 9804950 A
AU 9726345 A	Based on	WO 9740023 A
CZ 9803390 A3	Based on	WO 9740023 A
EP 907643 A1	Based on	WO 9740023 A
BR 9708854 A	Based on	WO 9740023 A
HU 9902668 A2	Based on	WO 9740023 A
JP 2000508666 W	Based on	WO 9740023 A
AU 722421 B	Based on	WO 9740023 A
KR 2000010626 A	Based on	WO 9740023 A
EP 907643 B1	Based on	WO 9740023 A
DE 69718469 E	Based on	WO 9740023 A
IL 126235 A	Based on	WO 9740023 A
CZ 291982 B6	Based on	WO 9740023 A

PRIORITY APPLN. INFO: DK 1996-1344 19961126
DK 1996-489 19960424
WO 1997-DK186 19970424

ED 20050520

AB WO 1997040023 A1 UPAB: 20060113

Compounds of formula (I) and their salts are new. R1 = H or 1-6C alkyl (optionally substituted by aryl); a, b = 1 or 2; c, d = 0-2; c + d = 0-2; R2-R4, R6-R11 = H; or aryl or 1-6C alkyl, both optionally substituted by Q; Q = halo, NH2, 3-6C cycloalkyl, OH, aryl, COOR22 or CONR23R24; or R3+R4 and/or R8+R9 = =O or =S; R5 = H, C(O)R30, SO2R30, C(O)OR30, C(O)N(R31)R30, C(=S)N(R31)R30, or 1-6C alkyl optionally substituted by aryl, OH, 3-6C cycloalkyl, NH2, CO2R25, CONR26R27, NR'R'' or a group of formula (f) or (g); R, R', R'' = H or 1-6C alkyl; R30, R31 = 1-6C alkyl optionally substituted by aryl, OH, 3-6C cycloalkyl or NH2; R22-R27 = H or 1-6C alkyl; when R3+R4 = =O or =S, E = a group of formula (h)-(m) or R17NH(CR18R19)p(CH2)mM(CHR20)o(CH2)n-(n), otherwise E = (i)-(n); R12-R20 = H or 1-6C alkyl optionally substituted by halo, NH2, OH or aryl; any two of R17-R19 may together form a 1-6C alkylene bridge; n, m, q = 0-3; o, p = 0 or 1; M = CH=CR21, O, S or a valence bond; Q = CH=CR21, O or S; R21 = H or 1-6C alkyl optionally substituted by halo, NH2, OH or aryl; G, J = H; or phenyl, pyridinyl, naphthyl, O(CH2)rPh, indolyl, imidazolyl, thienyl or benzothienyl, all substituted by R28; R28 = H, halo, 1-6C alkyl, 1-6C alkoxy or aryl; and r = 0-2.

USE - (I) is used to stimulate release of growth hormone from the pituitary (pref. dosage is 0.0001-100 (most pref. 0.001-50) mg/kg/day), to increase rate and extent of growth in animals, to increase milk and wool production, and to treat ailments. Also claimed is use to stimulate growth hormone release in the elderly; prevent catabolic side effects of glucocorticoids, stimulate the immune system, accelerate wound healing and bone fracture repair, treat growth retardation, renal failure or insufficiency resulting from growth retardation, physiological short stature, obesity, Prader-Willi syndrome, Turner's syndrome; accelerate recovery of burn patients; treat intrauterine growth retardation, skeletal dysplasia, hypercorticism and Cushing's syndrome; induce pulsatile growth hormone release; replace growth hormone in stressed patients, treat

osteochondro-dysplasias, Noonan's syndrome, schizophrenia, depression, Alzheimer's disease, pulmonary dysfunction, reduce cachexia and protein loss; treat hyperinsulinaemia, stimulate thymic development, improve muscle strength, maintain skin thickness, metabolic and renal homeostasis, bone remodelling and cartilage growth, and stimulate the immune system.

L131 ANSWER 18 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1997-393266 [36] WPIX
 DOC. NO. CPI: C1997-126265 [36]
 TITLE: New pyrido-1,2,4-thiadiazine and pyrido-1,4-thiazine derivatives - are modulators of ATP-sensitive potassium channels used to treat diseases of CNS, cardiovascular, pulmonary, gastrointestinal and endocrinological systems
 DERWENT CLASS: B02
 INVENTOR: DE TULLIO P; DELARGE E; DELARGE J; DELARGE J E;
HANSEN B; HANSEN C; HANSEN H C; HANSEN J B;
 LEBRUN P; NIELSEN E; NIELSEN F E; PIROTE B; SOMERS F
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C)
NOVO-NORDISK AS; (UYLI-N) UNIV LIEGE
 COUNTRY COUNT: 74

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9726264	A1	19970724	(199736)*	EN	47[0]	<--
AU 9714370	A	19970811	(199747)	EN		<--
ZA 9700353	A	19980429	(199822)	EN	43[0]	<--
US 5792764	A	19980811	(199839)	EN		<--
NO 9803285	A	19980916	(199847)	NO		<--
EP 877748	A1	19981118	(199850)	EN		<--
CZ 9802205	A3	19981216	(199904)	CS		<--
CN 1208418	A	19990217	(199926)	ZH		<--
BR 9707004	A	19990720	(199940)	PT		<--
HU 9902648	A2	20000228	(200020)	HU		<--
JP 2000503651	W	20000328	(200026)	JA	60	<--
MX 9805740	A1	19990101	(200051)	ES		<--
KR 99077320	A	19991025	(200052)	KO	[0]	<--
AU 727905	B	20010104	(200107)	EN		<--
IL 125072	A	20021201	(200282)	EN		<--
MX 206012	B	20020117	(200307)	ES		<--

RU 2193564	C2 20021127 (200307)	RU
EP 877748	B1 20041103 (200475)	EN
DE 69731458	E 20041209 (200481)	DE
IN 9700057	I4 20050304 (200555)	EN
DE 69731458	T2 20051222 (200601)	DE

<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9726264 A1		WO 1997-DK18	<u>19970116</u>
IN 9700057 I4		IN 1997-CH57	<u>19970115</u>
AU 9714370 A		AU 1997-14370	<u>19970116</u>
AU 727905 B		AU 1997-14370	<u>19970116</u>
BR 9707004 A		BR 1997-7004	<u>19970116</u>
CN 1208418 A		CN 1997-191748	<u>19970116</u>
DE 69731458 E		DE 1997-69731458	<u>19970116</u>
DE 69731458 T2		DE 1997-69731458	<u>19970116</u>
EP 877748 A1		EP 1997-900933	<u>19970116</u>
EP 877748 B1		EP 1997-900933	<u>19970116</u>
DE 69731458 E		EP 1997-900933	<u>19970116</u>
DE 69731458 T2		EP 1997-900933	<u>19970116</u>
IL 125072 A		IL 1997-125072	<u>19970116</u>
JP 2000503651 W		JP 1997-525608	<u>19970116</u>
NO 9803285 A		WO 1997-DK18	<u>19970116</u>
EP 877748 A1		WO 1997-DK18	<u>19970116</u>
CZ 9802205 A3		WO 1997-DK18	<u>19970116</u>
BR 9707004 A		WO 1997-DK18	<u>19970116</u>
HU 9902648 A2		WO 1997-DK18	<u>19970116</u>
JP 2000503651 W		WO 1997-DK18	<u>19970116</u>
KR 99077320 A		WO 1997-DK18	<u>19970116</u>
RU 2193564 C2		WO 1997-DK18	<u>19970116</u>
EP 877748 B1		WO 1997-DK18	<u>19970116</u>
DE 69731458 E		WO 1997-DK18	<u>19970116</u>
DE 69731458 T2		WO 1997-DK18	<u>19970116</u>
ZA 9700353 A		ZA 1997-353	<u>19970116</u>
US 5792764 A		US 1997-785435	<u>19970117</u>
CZ 9802205 A3		CZ 1998-2205	<u>19970116</u>
RU 2193564 C2		RU 1998-115386	<u>19970116</u>
KR 99077320 A		KR 1998-705467	<u>19980716</u>
MX 9805740 A1		MX 1998-5740	<u>19980716</u>
MX 206012 B		MX 1998-5740	<u>19980716</u>
NO 9803285 A		NO 1998-3285	<u>19980716</u>
HU 9902648 A2		HU 1999-2648	<u>19970116</u>

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 727905 B	Previous Publ	AU 9714370 A
DE 69731458 E	Based on	EP 877748 A
DE 69731458 T2	Based on	EP 877748 A
AU 9714370 A	Based on	WO 9726264 A
EP 877748 A1	Based on	WO 9726264 A
CZ 9802205 A3	Based on	WO 9726264 A
BR 9707004 A	Based on	WO 9726264 A
HU 9902648 A2	Based on	WO 9726264 A

JP 2000503651 W	Based on	WO 9726264 A
KR 99077320 A	Based on	WO 9726264 A
AU 727905 B	Based on	WO 9726264 A
IL 125072 A	Based on	WO 9726264 A
RU 2193564 C2	Based on	WO 9726264 A
EP 877748 B1	Based on	WO 9726264 A
DE 69731458 E	Based on	WO 9726264 A
DE 69731458 T2	Based on	WO 9726264 A

PRIORITY APPLN. INFO: DK 1996-246 19960305

DK 1996-42 19960117
DK 1996-247 19960305
DK 1996-248 19960305
DK 1996-249 19960305
WO 1997-DK18 19970116

ED 20050518

AB WO 1997026264 A1 UPAB: 20060201

Pyrido thiadiazine and pyrido thiazine compounds of formula (I) and their salts are new: B = NR₅ or CR₅R₆; R₅, R₆ = H, OH, 1-6C alkoxy or 1-6C alkyl, 3-6C cycloalkyl, 2-6C alkenyl or 2-6C alkynyl optionally mono- or poly-substituted; or R₄+R₅ = bond; D = -S(O)₂- or -S(O)-; or D-B = -S(O)(R₁₀)=N-; R₁₀ = 1-6C alkyl or aryl or heteroaryl optionally mono- or poly- substituted; R₁ = H, OH, 1-6C alkoxy or 1-6C alkyl, 3-6C cycloalkyl, 2-6C alkenyl or 2-6C alkynyl optionally mono- or poly- substituted; R₄ = H or R₄ + R₁ = bond; R₂ = H, OH, 1-6C alkoxy or 1-6C alkyl, 3-6C cycloalkyl, 2-6C alkenyl or 2-6C alkynyl optionally mono- or poly- substituted; R₃ = e.g. R₁₁, OR₁₁, -C(=X)R₁₁, -NR₁₁R₁₂, bicycloalkyl, aryl, heteroaryl, arylalkyl or heteroarylalkyl optionally mono- or poly-substituted, or 1-6C alkoxy carbonyl etc.; or NR₂R₃ = 3-12 membered mono- or bicyclic system in which one or more of the C atoms may be replaced by N, O or S and the rings are optionally substituted; R₁₁ = H, 3-6C cycloalkyl, 3-6C cycloalkyl(1-6C)alkyl (the cycloalkyl group being optionally mono- or poly-substituted), a 3-6 membered saturated ring system comprising one or more N, O or S atoms or 1-18C alkyl optionally mono- or poly- substituted; X = O or S; R₁₂ = H, 1-6C alkyl, 2-6C alkenyl or 3-6C cycloalkyl optionally mono- or poly- substituted; or NR₁₁R₁₂ = 3-12 membered mono- or bicyclic system in which one or more of the C atoms may be replaced by N, O or S and the rings are optionally substituted; A forms a pyridine ring of e.g. formula (c) or (d); R₇-R₉ = e.g. H, halo, 1-12C alkyl, 3-6C cycloalkyl, OH, 1-6C alkoxy(1-6)alkyl, NO₂, NH₂, CN, cyanomethyl, perhalomethyl, 1-6C mono- or di-alkylamino, sulphamoyl, 1-6C alkylthio, 1-6C alkylsulphonyl, 1-6C mono- or di-alkylaminocarbonyl; 1-6C mono- or di-alkylaminothiocarbonyl, ureido, carboxy(1-6C)alkyl, acyl, aryl, arylalkyl, aryloxy, (1,2,4-oxadiazol-5-yl)- or (1,2,4-oxadiazol-3-yl)-(1-6C)alkyl etc.; or a 5 or 6 membered N containing ring optionally substituted; with proviso.

USE - (I) are openers or blockers of the ATP-regulated potassium channels and so can be used for the treatment of various diseases of the cardiovascular system e.g. cerebral ischaemia, hypertension, ischaemic heart diseases, angina pectoris and coronary heart diseases; the pulmonary system; the gastrointestinal system, the CNS e.g. epilepsy, ischaemia, neurodegenerative diseases and in the management of pain and the endocrinological system. - (I) can also be used to treat vasospastic disorders e.g. subarachnoid haemorrhage and migraine, various neurological and psychiatric diseases e.g. Alzheimer's, epilepsy and cerebral ischaemia, diseases associated with decreased skeletal muscle blood flow e.g. Reynaud's disease and intermittent claudication, chronic airway

diseases including asthma, detrusor muscle instability secondary to bladder outflow obstruction and so for kidney stones by aiding their passage along the ureter, to relax urinary bladder smooth muscle and so treat urinary incontinence, irritable bowel syndrome and disturbances of gastrointestinal (GI) mobility, premature labour, dysmenorrhoea, baldness, nesidioblastosis and insulinoma in which a hypersecretion of insulin causes severe hypoglycaemia and hyperinsulinaemia so preventing diabetes and reducing obesity.

L131 ANSWER 19 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1997-087325 [08] WPIX
 DOC. NO. CPI: C1997-028426 [08]
 TITLE: New peptide derivs. useful as pituitary growth hormone stimulants - e.g. (R)-2-((3-aminomethyl-benzoyl)-N-Me-D-2Nal-N-Me)-3-phenyl:propanol
 DERWENT CLASS: B04; B05; C02; C03
 INVENTOR: HANSEN B S; HANSEN T K; HOEGERSEN H;
 JOHANSEN N L; LAU J; LUNDT B F; MADSEN K; PESCHKE B;
 THOEGERSEN H
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C)
NOVO-NORDISK AS
 COUNTRY COUNT: 73

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
WO 9700894	A1 19970109 (199708)*	EN 61[0]			<--
ZA 9605279	A 19970226 (199714)	EN 31[0]			<--
AU 9661882	A 19970122 (199719)	EN			<--
EP 833845	A1 19980408 (199818)	EN [0]			<--
NO 9705992	A 19980220 (199818)	NO			<--
CZ 9704081	A3 19980513 (199825)	CS			<--
BR 9608909	A 19990302 (199915)	PT			<--
HU 9802821	A2 19990329 (199921)	HU			<--
JP 11507928	W 19990713 (199938)	JA 61			<--
AU 711104	B 19991007 (199954)	EN			<--
MX 9710377	A1 19980301 (200002)	ES			<--
KR 99028303	A 19990415 (200027)	KO [0]			<--
CZ 287948	B6 20010314 (200117)	CS			<--
TW 458958	A 20011011 (200247)	ZH			<--
IL 122371	A 20020630 (200264)	EN			<--

Zhang 10/699,338

12/06/2006

CN 1188484	A 19980722 (200270) ZH	<--
IN 9601093	I4 20050304 (200612) EN	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9700894 A1		WO 1996-DK266	<u>19960619</u>
AU 9661882 A		AU 1996-61882	<u>19960619</u>
AU 711104 B		AU 1996-61882	<u>19960619</u>
BR 9608909 A		BR 1996-8909	<u>19960619</u>
CN 1188484 A		CN 1996-194947	<u>19960619</u>
EP 833845 A1		EP 1996-920742	<u>19960619</u>
IL 122371 A		IL 1996-122371	<u>19960619</u>
NO 9705992 A		WO 1996-DK266	<u>19960619</u>
EP 833845 A1		WO 1996-DK266	<u>19960619</u>
CZ 9704081 A3		WO 1996-DK266	<u>19960619</u>
BR 9608909 A		WO 1996-DK266	<u>19960619</u>
HU 9802821 A2		WO 1996-DK266	<u>19960619</u>
JP 11507928 W		WO 1996-DK266	<u>19960619</u>
KR 99028303 A		WO 1996-DK266	<u>19960619</u>
CZ 287948 B6		WO 1996-DK266	<u>19960619</u>
ZA 9605279 A		ZA 1996-5279	<u>19960622</u>
TW 458958 A		TW 1996-107813	<u>19960628</u>
CZ 9704081 A3		CZ 1997-4081	<u>19960619</u>
CZ 287948 B6		CZ 1997-4081	<u>19960619</u>
JP 11507928 W		JP 1997-503521	<u>19960619</u>
MX 9710377 A1		MX 1997-10377	<u>19971218</u>
NO 9705992 A		NO 1997-5992	<u>19971219</u>
KR 99028303 A		KR 1997-709617	<u>19971222</u>
HU 9802821 A2		HU 1998-2821	<u>19960619</u>
IN 9601093 I4		IN 1996-CH1093	<u>19960620</u>

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 711104 B	Previous Publ	AU 9661882 A
CZ 287948 B6	Previous Publ	CZ 9704081 A
AU 9661882 A	Based on	WO 9700894 A
EP 833845 A1	Based on	WO 9700894 A
CZ 9704081 A3	Based on	WO 9700894 A
BR 9608909 A	Based on	WO 9700894 A
HU 9802821 A2	Based on	WO 9700894 A
JP 11507928 W	Based on	WO 9700894 A
AU 711104 B	Based on	WO 9700894 A
KR 99028303 A	Based on	WO 9700894 A
CZ 287948 B6	Based on	WO 9700894 A
IL 122371 A	Based on	WO 9700894 A

PRIORITY APPLN. INFO: DK 1995-1371 19951204
DK 1995-719 19950622
WO 1996-DK266 19960619

ED 20050515

AB WO 1997000894 A1 UPAB: 20060112

Peptide derivs. of formula A-B-C-D(-E)p (I) and their salts are new, in
 which p = 0 or 1; A = H or R1-(CH₂)q-(X)r-(CH₂)s-CO- ; q = 0 or 1-5; r = 0

or 1; s = 0 or 1-5; R1 = H, imidazolyl, guanidino, piperazino, morpholino, piperidino or NR2R3; R2, R3 = H or lower alkyl opt. substd. by 1 or more OH, pyridinyl or furanyl gps.; X, when r = 1, is NH, CH₂, CH=CH, C(R16)(R17), or a bivalent thieryl, cyclohexyl, phenyl or naphthyl gp.; R16, R17 = H or lower alkyl; B = (G)t-(H)u; t,u = 0 or 1; G, H = amino acid residues selected from natural L-amino acids or their corresponding D-isomers, or non-natural amino acids such as 1,4-diaminobutyric acid, amino-isobutyric acid, 1,3-diaminopropionic acid or 4-aminophenylalanine; when both t and u = 1, the amide bond between G and H is opt. replaced by Y-NR18; Y = CO or CH₂; R18 = H, lower alkyl or lower aralkyl; C = D-amino acid of formula -NH-CH((CH₂)_w-R4)-CO-; D = a D-amino acid of formula -NR20-CH((CH₂)_k-R5)-CO- when p=1; or an amino acid of formula -NR20-CH((CH₂)_l-R5)-CH₂-R6 or -NR20-CH((CH₂)_m-R5)-CO-R6 when p = 0; w = 0, 1 or 2; R4, R5 = phenyl, naphthyl, pyridyl, indolyl, thieryl or benzothienyl each opt. substd. by halogen, lower alkyl, lower alkyloxy, lower alkylamino, amino or hydroxy, provided that R5 does not contain a lower alkylamino substituent; k, l, m each = 0,1 or 2; R20 = lower alkyl or lower aralkyl; R6 = piperazino, morpholino, piperidino, OH or NR7R8; R7, R8 = H or lower alkyl; E = -NHCH(R10)-(CH₂)_vR9; v = 0-8; R9 = H, imidazolyl, guanidino, piperazino, morpholino, piperidino, NR11R12, etc.; R11, R12 = H, lower alkyl, phenyl, naphthyl, pyridyl, indolyl, thieryl or benzothienyl each opt. substd. by halogen, lower alkyl, lower alkyloxy, amino, alkylamino, hydroxy or the Amadori rearrangement product from an amino gp. and a hexapyranose or a hexapyranosyl-hexapyranose; R10 = H, CO₂H, CH₂R13, COR13 or CH₂OH; R13 = piperazino, morpholino, piperidino, OH or NR14R15; R14, R15 = H or lower alkyl; all amide bonds within (I) with the exception of the C-D bond may independently be replaced by Y-NR18. 15 Specific cpds. are excluded.

USE - (I) stimulate release of growth hormone from the pituitary and thus are useful for increasing the rate and extent of growth of animals and for increasing their milk or wool production (claimed). They are also useful for stimulating growth hormone release in the elderly, stimulating the immune system, accelerating wound and broken bone healing, treating growth retardation (and obesity associated with it), treating Alzheimer's disease, treating hyperinsulinaemia, stimulating thymic development, improving muscle strength, and generally treating ailments associated with low levels of growth hormone.

L131 ANSWER 20 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1996-362630 [36] WPIX
DOC. NO. CPI: C1996-114239 [36]
TITLE: New peptide derivs. with growth hormone releasing properties - for increasing milk production, treating Alzheimer's disease etc.
DERWENT CLASS: B04; C03
INVENTOR: ANKERSEN J M; ANKERSEN M; HANSEN K; HANSEN T; HANSEN T K; JOHANSEN L; JOHANSEN N; JOHANSEN N L; LAU J; PESCHKE B
PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C) NOVO-NORDISK AS
COUNTRY COUNT: 73

PATENT INFO ABBR.:

PATENT NO KIND DATE WEEK LA PG MAIN IPC

WO 9622997 A1 19960801 (199636)* EN 253 [0]

ZA 9600544	A	19961030 (199649)	EN	26[0]	<--
AU 9644315	A	19960814 (199650)	EN		<--
NO 9703446	A	19970926 (199749)	NO		<--
EP 805816	A1	19971112 (199750)	EN	[0]	<--
CZ 9702381	A3	19971217 (199807)	CS		<--
BR 9606845	A	19980526 (199827)	PT		<--
HU 9702388	A2	19980428 (199827)	HU		<--
MX 9705710	A1	19971001 (199901)	ES		<--
JP 11500107	W	19990106 (199911)	JA	249	<--
KR 98701738	A	19980625 (199924)	KO		<--
AU 705744	B	19990603 (199933)	EN		<--
US 6013658	A	20000111 (200010)	EN		<--
IL 116923	A	20000928 (200063)	EN		<--
CN 1176645	A	19980318 (200209)	ZH		<--
US 6350767	B1	20020226 (200220)	EN		<--
TW 482767	A	20020411 (200313)	ZH		<--
EP 805816	B1	20040728 (200452)	EN		<--
DE 69633003	E	20040902 (200457)	DE		<--
IN 9600125	I4	20050304 (200555)	EN		<--
DE 69633003	T2	20050818 (200556)	DE		<--
MX 235154	B	20060324 (200651)	ES		<--
CN 1225471	C	20051102 (200652)	ZH		<--
KR 450500	B	20050712 (200662)	KO		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9622997	A1	<u>WO 1996-DK45 19960126</u>	
IN 9600125	I4	<u>IN 1996-CH125 19960124</u>	
ZA 9600544	A	<u>ZA 1996-544 19960124</u>	
AU 9644315	A	<u>AU 1996-44315 19960126</u>	
AU 705744	B	<u>AU 1996-44315 19960126</u>	
BR 9606845	A	<u>BR 1996-6845 19960126</u>	
CN 1176645	A	<u>CN 1996-192184 19960126</u>	
CN 1225471	C	<u>CN 1996-192184 19960126</u>	
DE 69633003	E	<u>DE 1996-633003 19960126</u>	
DE 69633003	T2	<u>DE 1996-633003 19960126</u>	
EP 805816	A1	<u>EP 1996-900550 19960126</u>	
EP 805816	B1	<u>EP 1996-900550 19960126</u>	
DE 69633003	E	<u>EP 1996-900550 19960126</u>	

DE 69633003 T2	EP 1996-900550 19960126
IL 116923 A	IL 1996-116923 19960126
JP 11500107 W	JP 1996-522559 19960126
AU 9644315 A	WO 1996-DK45 19960126
NO 9703446 A	WO 1996-DK45 19960126
EP 805816 A1	WO 1996-DK45 19960126
CZ 9702381 A3	WO 1996-DK45 19960126
BR 9606845 A	WO 1996-DK45 19960126
HU 9702388 A2	WO 1996-DK45 19960126
JP 11500107 W	WO 1996-DK45 19960126
KR 98701738 A	WO 1996-DK45 19960126
US 6013658 A Cont of	WO 1996-DK45 19960126
US 6350767 B1 Cont of	WO 1996-DK45 19960126
EP 805816 B1	WO 1996-DK45 19960126
DE 69633003 E	WO 1996-DK45 19960126
DE 69633003 T2	WO 1996-DK45 19960126
MX 235154 B	WO 1996-DK45 19960126
TW 482767 A	TW 1996-102211 19960227
CZ 9702381 A3	CZ 1997-2381 19960126
HU 9702388 A2	HU 1997-2388 19960126
US 6013658 A	US 1997-897239 19970717
US 6350767 B1 Div Ex	US 1997-897239 19970717
NO 9703446 A	NO 1997-3446 19970725
KR 98701738 A	KR 1997-705134 19970728
MX 9705710 A1	MX 1997-5710 19970728
MX 235154 B	MX 1997-5710 19970728
US 6350767 B1	US 1999-443993 19991119
KR 450500 B	WO 1996-DK45 19960126
KR 450500 B	KR 1997-705134 19970728

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 705744	B	Previous Publ
DE 69633003	E	Based on
DE 69633003	T2	Based on
US 6350767	B1	Div ex
AU 9644315	A	Based on
EP 805816	A1	Based on
CZ 9702381	A3	Based on
BR 9606845	A	Based on
HU 9702388	A2	Based on
JP 11500107	W	Based on
KR 98701738	A	Based on
AU 705744	B	Based on
EP 805816	B1	Based on
DE 69633003	E	Based on
DE 69633003	T2	Based on
MX 235154	B	Based on
KR 450500	B	Previous Publ
KR 450500	B	Based on

PRIORITY APPLN. INFO: DK 1995-1372 19951204
DK 1995-99 19950127
DK 1995-100 19950127
DK 1995-1083 19950928

<u>DK</u>	<u>1995-1084</u>	<u>19950928</u>
<u>DK</u>	<u>1995-1083</u>	<u>19950128</u>
<u>DK</u>	<u>1995-1084</u>	<u>19950128</u>
<u>WO</u>	<u>1996-DK45</u>	<u>19960126</u>

ED 20051007

AB WO 1996022997 A1 UPAB: 20060111

Peptide derivs. of formula (I) and their salts and optical isomers are new; n = 0 or 1; m = 1-2; p = 0-2; A = CH₂C(O), N(R1)C(=W), CH=CH, OCH₂, N(R1)CH₂ or CH(OR1)CH₂; R1 = H or 1-6C alkyl; W = O or S; B = (CH(OR2)CH₂, CH₂(O), N(R2)C(=W')), CH=CH, OCH₂ or N(R2)CH₂; R2 = H or 1-6C alkyl; W' = O or S; D = CH(R4)-N(R3)-C(=O)-(CH₂)_o-(CR7R8)s-(CH₂)_r-NR5R6 or (CH₂)_o-(M)q-(CH₂)_t-(CR7R8)s-(CH₂)_r-NR5R6; R3-R8 = H or 1-6C alkyl (opt. substd. by halo, amino, OH or aryl); or R5+R6, R6+R7, R5+R8 or R7+R8 = (CH₂)_i-U-(CH₂)_j; i,j = 1-2; U = O, S or a bond; M = O, S, CH=CH, phenylene, pyridylene, naphthylene or thienylene (opt. substd. by halo, amino, OH, 1-6C alkyl or 1-6C alkoxy); o, r, t = 0-4; q, s = 0-1; r+s+t = 1-4; E = H, CH(K)L or a gp. of formula (a) or (b); L = H, OR9, CONR9R10, 1-6C alkyl (opt. substd. by OH or 1-6C alkoxy); or a gp. (a) or (b); R9,R10 = H or 1-6C alkyl; or R9+R10 = (CH₂)_k-U'-(CH₂)_l; k, l = 1-3; k+l = 3-6; U' = O, S or a bond; X = N(R11), O or S; V = (CR12) or N; Y = (CR13) or N; Z = C(R14) or N; R12-R14 = H, CO₂R15, CONR16R17, C(CH₂)_v-NR16R17, -(CH₂)_uOR15, halo, OH, 1-6C alkyl, Ph, oxazol-5-yl or 5-methyl-(1,2,4)oxadiazol-3-yl; R11,R15-R17 = H or 1-6C alkyl (opt. substd. by aryl); u,v = 0-6; K = H or -(CH₂)_d-(CR20R21)b-(CH₂)_a-QR18R19; R18-R21 = H or 1-6C alkyl (opt. substd. by halo, amino, 1-6C alkylamino, OH or aryl) or R18+R19, R18+R21, R19+R20 or R20+R21 = (CH₂)_{k'}-Z-(CH₂)_{l'}; k',l' = 1-3; k'+l' = 3-6; Z = O, S or a bond; b = 0-1; a,d = 0-4; a+b = 1-4; Q = CR22 or N; R22 = H or 1-6C alkyl; F = CH(OR23)CH₂, CH₂C(O), N(R23)C(=W''), CH=CH, OCH₂ or N(R23)CH₂; R23 = H or 1-6C alkyl; W'' = O or S, and J,G = phenyl, pyridyl, naphthyl, thienyl, imidazolyl or indolyl (opt. substd. by halo, amino, OH, 1-6C alkyl or 1-6C alkoxy).

USE - (I) stimulate release of growth hormone from the pituitary. They are used to treat conditions which require increased plasma growth hormone levels, such as in growth hormone deficient humans or in elderly patients or livestock. Growth hormone is used to e.g. prevent catabolic side effects of glucocorticoids, to treat or prevent osteoporosis, to stimulate the immune system, accelerate wound healing or fracture repair, treat growth retardation, renal failure or insufficiency resulting from growth retardation, treat physiological short stature including growth hormone deficient children and short stature associated with chronic illness, treat obesity and growth retardation associated with obesity, treat growth retardation associated with Prader-Willi syndrome and Turner's syndrome, accelerate the recovery and reduce hospitalisation of burn patients, treat intrauterine growth retardation, skeletal dysplasia, hyper-cortisolism and Cushing's syndrome, induce of pulsatile growth hormone release, replace growth hormone in stressed patients, treat osteochondro-dysplasia, Noonan's syndrome, schizophrenia, depression, Alzheimer's disease, delayed wound healing and psycho-social deprivation, treat pulmonary dysfunction and ventilator dependency, attenuate protein catabolic response after major surgery, reduce cachexia or protein loss due to chronic illness such as cancer or AIDS, treat hyperinsulinaemia including nesidioblastosis, adjuvant treatment for ovulation induction, to stimulate thymic development and prevent age-related decline of thymic function, treat immuno-suppressed patients, improve muscle strength, mobility, maintenance of skin thickness, metabolic homeostasis, renal homeostasis in the frail elderly, stimulate osteoblasts, bone remodelling and cartilage growth, stimulate the immune system in companion animals and

treat disorder of ageing in companion animals, growth promoter livestock and stimulate wool growth in sheep (claimed). Dosage is 0.0001-100 (especially 0.001-50) mg/kg body weight/day orally, nasally, pulmonary or transdermally. Unit dosage forms contain 10-200 mg (I).

ADVANTAGE - (I) may be administered to commercially important animals to increase their rate and extent of growth and to increase milk production

L131 ANSWER 21 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1996-139627 [14] WPIX
 DOC. NO. CPI: C1996-043879 [14]
 TITLE: New N-substd. naphtho-fused lactams - stimulate production of growth hormone from the pituitary, e.g. in the elderly or to increase growth and productivity of livestock
 DERWENT CLASS: B02; C02
 INVENTOR: ANDERSEN K E; HANSEN B; HANSEN B S;
 HANSEN T; HANSEN T K; PESCHKE B;
 THOGERSEN H
 PATENT ASSIGNEE: (NOVO-C) NOVO NORDISK AS; (NOVO-C)
 NOVO-NORDISK AS
 COUNTRY COUNT: 67

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9605195	A1	19960222	(199614)*	EN	38[0]	<--
AU 9531618	A	19960307	(199624)	EN		<--
ZA 9506869	A	19960626	(199631)	EN	37[0]	<--
NO 9700684	A	19970417	(199726)	NO		<--
EP 777668	A1	19970611	(199728)	EN	[0]	<--
CZ 9700458	A3	19971015	(199748)	CS		<--
BR 9508805	A	19980106	(199810)	PT		<--
TW 321640	A	19971201	(199814)	ZH		<--
HU 76645	T	19971028	(199815)	HU		<--
MX 9701187	A1	19970501	(199823)	ES		<--
JP 10504293	W	19980428	(199827)	JA	39	<--
US 5817654	A	19981006	(199847)	EN		<--
AU 697003	B	19980924	(199850)	EN		<--
IL 114955	A	19991222	(200008) #	EN		<--
CN 1158127	A	19970827	(200140)	ZH		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9605195 A1		WO 1995-DK332	19950817
IL 114955 A		IL 1995-114955	19950816
AU 9531618 A		AU 1995-31618	19950817
AU 697003 B		AU 1995-31618	19950817
BR 9508805 A		BR 1995-8805	19950817
CN 1158127 A		CN 1995-195133	19950817
EP 777668 A1		EP 1995-927662	19950817
NO 9700684 A		WO 1995-DK332	19950817
EP 777668 A1		WO 1995-DK332	19950817
CZ 9700458 A3		WO 1995-DK332	19950817
BR 9508805 A		WO 1995-DK332	19950817
HU 76645 T		WO 1995-DK332	19950817
JP 10504293 W		WO 1995-DK332	19950817
US 5817654 A Cont of		WO 1995-DK332	19950817
ZA 9506869 A		ZA 1995-6869	19950817
TW 321640 A		TW 1995-109669	19950915
JP 10504293 W		JP 1996-506935	19950817
CZ 9700458 A3		CZ 1997-458	19950817
HU 76645 T		HU 1997-1234	19950817
US 5817654 A		US 1997-790133	19970129
MX 9701187 A1		MX 1997-1187	19970214
NO 9700684 A		NO 1997-684	19970214

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 697003 B	Previous Publ	AU 9531618 A
AU 9531618 A	Based on	WO 9605195 A
EP 777668 A1	Based on	WO 9605195 A
CZ 9700458 A3	Based on	WO 9605195 A
BR 9508805 A	Based on	WO 9605195 A
HU 76645 T	Based on	WO 9605195 A
JP 10504293 W	Based on	WO 9605195 A
AU 697003 B	Based on	WO 9605195 A

PRIORITY APPLN. INFO: DK 1994-952 19940817
IL 1995-114955 19950816
WO 1995-DK332 19950817

ED 20051007

AB WO 1996005195 A1 UPAB: 20060111

Naphtho-fused lactams of formula (I) and their salts are new: R1, R2 and R3 = H, halo, CF₃ or 1-6C alkyl, alkoxy or alkylthio; n = 0 or 1; p and w = 0-2; q = 0-4; X = O₁S(O)_m or NR₄; R₄ = H or 1-6C alkyl; m = 0-2; A = residue of benzene, pyridine, all opt. subst. by halo, NH₂ or 1-6C alkylamino, alkyl, alkoxy or alkylthio; Z = O, S or NR₄; B = H; M-substd. phenyl or pyridyl; all opt. substd. as for A; M = COOR₁₂, CONR₁₂R₁₃, NHCONR₁₂R₁₃ or SONR₁₂R₁₃, or is any isomer of tetrazole, triazole, oxadiazole or thiadiazole (all opt. substd. as A); R₁₂ and R₁₃ = H, 1-6C alkyl or 4-8C cycloalkyl; D = (CH₂)_r-CR₇R₈(CH₂)_s-NR₉R₁₀; r, s = 0-3; R₇, R₈ = H or 1-10C alkyl, or together form a 2-6C atom bridge; or each may independently be joined to 1 or both of R₉ and R₁₀ to form 2-5C atom bridges; R₉, R₁₀ = H, opt. subst. phenyl or opt. branched 1-10C (hydroxy)alkyl.

USE - (I) stimulate release of growth hormone (GH) from the pituitary so can be used to treat a very wide range of conditions, e.g. catabolic effects of glucocorticoids; osteoporosis, obesity; Cushing's syndrome; Alzheimer's disease; cachexia in AIDS or cancer patients etc., also to accelerate wound healing and repair of bone fractures. (I) can also be used in livestock to increase the rate and extent of growth, or to improve production of milk or wool.

L131 ANSWER 22 OF 22 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 ACCESSION NUMBER: 1986-264939 [40] WPIX
 CROSS REFERENCE: 1986-264938
 DOC. NO. CPI: C1986-114695 [21]
 TITLE: New insulin derivs. with uncharged side chain at A4, A17,
 B13 or B21 - useful as prolonged acting forms of insulin
 B04
 DERWENT CLASS:
 INVENTOR: BALSCHMIDT P; HANSEN B F; HANSEN F; HANSEN F B
 PATENT ASSIGNEE: (NORD-N) NORDISK GENTOFTE AS; (NOVO-C)
NOVO-NORDISK AS
 COUNTRY COUNT: 16

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 8605497	A	19860925	(198640)*	EN	18[0]	<--
AU 8656227	A	19861013	(198651)	EN		<--
NO 8604556	A	19870119	(198709)	NO		<--
EP 216833	A	19870408	(198714)	EN		<--
FI 8604560	A	19861110	(198731)	FI		<--
JP 62502538	W	19871001	(198745)	JA		<--
DK 8605457	A	19861114	(198750)	DA		<--
US 5028586	A	19910702	(199129)	EN		<--
US 5157021	A	19921020	(199245)	EN	5[0]	<--
EP 216833	B1	19930113	(199302)	EN	14[0]	<--
DE 3687500	G	19930225	(199309)	DE		<--
NO 174278	B	19940103	(199406)	NO		<--
FI 93460	B	19941230	(199506)	FI		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8605497 A		WO 1986-DK23	19860314
DE 3687500 G		DE 1986-3687500	19860314
EP 216833 B1		EP 1986-901827	19860314

12/06/2006

DE 3687500 G	EP <u>1986-901827</u>	<u>19860314</u>
JP 62502538 W	JP <u>1986-501709</u>	<u>19860314</u>
EP 216833 B1	WO <u>1986-DK23</u>	<u>19860314</u>
DE 3687500 G	WO <u>1986-DK23</u>	<u>19860314</u>
NO 174278 B	WO <u>1986-DK23</u>	<u>19860314</u>
FI 93460 B	WO <u>1986-DK23</u>	<u>19860314</u>
FI 93460 B	FI <u>1986-4560</u>	<u>19861110</u>
DK 8605457 A	DK <u>1986-5457</u>	<u>19861114</u>
NO 174278 B	NO <u>1986-4556</u>	<u>19861114</u>
US 5028586 A	US <u>1987-2672</u>	<u>19870128</u>
US 5157021 A Div Ex	US <u>1987-2672</u>	<u>19870128</u>
US 5157021 A	US <u>1990-630835</u>	<u>19901220</u>

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 3687500 G	Based on	EP 216833 A
FI 93460 B	Previous Publ	FI 8604560 A
NO 174278 B	Previous Publ	NO 8604556 A
US 5157021 A	Div ex	US 5028586 A
EP 216833 B1	Based on	WO 8605497 A
DE 3687500 G	Based on	WO 8605497 A

PRIORITY APPLN. INFO: DK 1985-1197 19850315

ED 20050425

AB WO 1986005497 A UPAB: 20060105

Insulin derivs. (I) in which at least one of the 4-amino acid residues at posns. A4, A17, B13 and B21 comprises an uncharged side chain are new. Pref. (I) in which A4 and/or A17 is a glutamine residue is preferred. Specific derivs. include human insulin-A17-glu, -A4-glu, -B21-glu, -B13-glu, -(A17,B21)-glu, -A4-ala, -B21-thr, -B13-val, -B21-thr-A17-glu, -B21-Me ester and -A17-Me ester. The insulin is human, porcine, ovine, bovine, rabbit, etc.

USE/ADVANTAGE - (I) on admin. by injection produce a prolonged action insulin-like effect, and so are useful for reducing the number of injections reqd. daily by a diabetes patient, e.g. 1 or 2 per 24 hrs. may be sufficient. (I) may also be used in a preparation with a fast-acting insulin.

4/4

Zhang 10/699,338 10/699 12/06/2006

=> d his ful

(FILE 'HOME' ENTERED AT 09:26:06 ON 06 DEC 2006)

FILE 'ZCPLUS' ENTERED AT 09:26:43 ON 06 DEC 2006
E US2003-699338/APPS

L1 FILE 'HCAPLUS' ENTERED AT 09:27:07 ON 06 DEC 2006
2 SEA ABB=ON PLU=ON US2003-699338/APPS
SAVE TEMP L1 ZHA338HCAAPP/A
D SCAN

FILE 'STNGUIDE' ENTERED AT 09:27:57 ON 06 DEC 2006
D QUE

FILE 'HCAPLUS' ENTERED AT 09:29:02 ON 06 DEC 2006
D IBIB ED AB IND 1-2

FILE 'STNGUIDE' ENTERED AT 09:29:02 ON 06 DEC 2006

L2 FILE 'WPIX' ENTERED AT 09:32:17 ON 06 DEC 2006
1 SEA ABB=ON PLU=ON US2003-699338/APPS
SAVE TEMP L2 ZHA338REGAPP/A
SAVE TEMP L2 ZHA338WPIAPP/A

FILE 'STNGUIDE' ENTERED AT 09:32:54 ON 06 DEC 2006
D QUE

FILE 'WPIX' ENTERED AT 09:33:10 ON 06 DEC 2006
D IALL CODE

FILE 'STNGUIDE' ENTERED AT 09:33:13 ON 06 DEC 2006

FILE 'STNGUIDE' ENTERED AT 09:33:22 ON 06 DEC 2006

FILE 'REGISTRY' ENTERED AT 09:36:26 ON 06 DEC 2006

L3 FILE 'HCAPLUS' ENTERED AT 09:36:29 ON 06 DEC 2006
TRA PLU=ON L1 1- RN : 334 TERMS

L4 FILE 'REGISTRY' ENTERED AT 09:36:32 ON 06 DEC 2006
334 SEA ABB=ON PLU=ON L3
SAVE TEMP L4 ZHA338REGAPP/A

L*** DEL 2 S L4 AND ?ACETOPHENON?
L5 2 SEA ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
D SCAN

L6 1 SEA ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
SAVE TEMP L6 ZHA338ES/A

FILE 'STNGUIDE' ENTERED AT 09:38:25 ON 06 DEC 2006
D QUE

FILE 'REGISTRY' ENTERED AT 09:38:37 ON 06 DEC 2006
D IDE L6

FILE 'STNGUIDE' ENTERED AT 09:38:38 ON 06 DEC 2006

FILE 'REGISTRY' ENTERED AT 09:39:34 ON 06 DEC 2006
L7 2 SEA ABB=ON PLU=ON 6322-56-1/RN,CRN
 SAVE TEMP L7 ZHA338ESM/A
 D SCAN

FILE 'ZCAPLUS' ENTERED AT 09:40:26 ON 06 DEC 2006
L8 QUE ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP" OR "6322-56-1
 D"
 E ANTIDIABETIC AGENTS/CT
 E E15+ALL
L9 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENTS"+PFT,OLD,NEW/CT
 E HYPERGLYCEMIA/CT
 E E58+ALL
L10 QUE ABB=ON PLU=ON HYPERGLYCEMIA+PFT,OLD,NEW,RT/CT
 E DIABETES/CT
 E E82+ALL
L11 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/CT
L12 QUE ABB=ON PLU=ON "DIABETES INSIPIDUS"+PFT,OLD,NEW,NT/CT
 E DYSЛИPIDEMIA/CT
 E E97+ALL
L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM?
 OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM? OR
 ?GLYCAEM?
L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM?
 OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPOGLUCEAM? OR HYPERGLUCAEM?

L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM? OR
 GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? OR
 ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCAEM?
L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM?
 OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR (HYPO(W) (GLY
 CEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM? OR
 GLUCAEM?))
 E OBESITY/CT
 E E132+ALL
L17 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
L18 QUE ABB=ON PLU=ON ANTIOBESITY AGENTS/CT
 E ANTIOBESITY AGENTS/CT
 E E165+ALL
L19 QUE ABB=ON PLU=ON "APPETITE DEPRESSANTS"+PFT,OLD,NEW,NT/CT
L20 QUE ABB=ON PLU=ON "ANTI OBESITY AGENTS"+PFT,OLD,NEW,NT/CT
L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR CORPULENCE
 OR CORPULENC?
 E ADIPOSITY/CT
 E E189+ALL
L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANTICORPUL
 ENC? OR ANTICORPULENT?
L23 QUE ABB=ON PLU=ON CORPULENT
L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A)?NITRO?) (5A)?HYDROX?
L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?))) (5A)?NIT
 RO?
L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113
L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?THERAP?
 OR REMED? OR ALLEVIAT?

FILE 'STNGUIDE' ENTERED AT 10:02:10 ON 06 DEC 2006

FILE 'ZCAPLUS' ENTERED AT 10:30:24 ON 06 DEC 2006

L28 QUE ABB=ON PLU=ON ANORECTIC
 L29 QUE ABB=ON PLU=ON (A61P003-04 OR A61P003-04 OR A61P003-04
 OR A61P003-04)/IPC

FILE 'WPIX' ENTERED AT 10:31:42 ON 06 DEC 2006

L30 QUE ABB=ON PLU=ON (B14-E07 OR C14-E07 OR B14-E12 OR C14-E12
 OR B12-J02 OR C12-J02 OR B14-F09 OR C14-F09 OR B12-H05 OR
 C12-H05 OR B14-S04 OR C14-S04 OR B14-S04A OR C14-S04A)/MC
 L31 QUE ABB=ON PLU=ON (P731 OR P816)/M0,M1,M2,M3,M4,M5,M6

FILE 'ZCAPLUS' ENTERED AT 10:34:22 ON 06 DEC 2006

L32 QUE ABB=ON PLU=ON HANSEN, B?/AU
 L33 QUE ABB=ON PLU=ON HANSEN, T?/AU
 L34 QUE ABB=ON PLU=ON SEHESTED, B?/AU
 L35 QUE ABB=ON PLU=ON TULLIN, S?/AU
 L36 QUE ABB=ON PLU=ON COLDING-JORGENSEN, M?/AU
 L37 QUE ABB=ON PLU=ON COLDING, M?/AU
 L38 QUE ABB=ON PLU=ON JORGENSEN, M?/AU
 L39 QUE ABB=ON PLU=ON (NORDISK OR NOVONORDISK)/CS,PA,SO
 L40 QUE ABB=ON PLU=ON (HANSEN OR SEHESTED OR TULLIN OR COLDING
 OR JORGENSEN OR (COLDING(W)JORGENSEN))/AU
 L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY<2003
 OR REVIEW/DT
 L42 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003

FILE 'HCAPLUS' ENTERED AT 10:39:36 ON 06 DEC 2006

L43 158 SEA ABB=ON PLU=ON L6 OR L7
 L44 12 SEA ABB=ON PLU=ON L43 AND ((L9 OR L10 OR L11 OR L12) OR L17
 OR L18 OR L19 OR L20)
 L45 5 SEA ABB=ON PLU=ON L43(L) (THU OR PKT OR PAC OR DMA OR BAC)/RL

 L46 6 SEA ABB=ON PLU=ON L43 (L) L27
 L47 2 SEA ABB=ON PLU=ON L43 (L) ((L13 OR L14 OR L15 OR L16) OR
 (L21 OR L22 OR L23) OR L28)
 L48 20 SEA ABB=ON PLU=ON (L44 OR L45 OR L46 OR L47)
 L49 16 SEA ABB=ON PLU=ON L48 AND (L9 OR L10 OR L11 OR L12 OR L13 OR
 L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR
 L23 OR L24 OR L25 OR L26 OR L27 OR L28)
 L50 0 SEA ABB=ON PLU=ON L8(L) (THU OR PKT OR PAC OR DMA OR BAC)/RL
 L51 0 SEA ABB=ON PLU=ON L8(L) ((L13 OR L14 OR L15 OR L16) OR (L21
 OR L22 OR L23) OR L28 OR L27)
 L52 51 SEA ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP" OR "6322-56-1
 D"
 L53 4 SEA ABB=ON PLU=ON L52 AND ((L9 OR L10 OR L11 OR L12) OR L17
 OR (L19 OR L20))
 L54 67 SEA ABB=ON PLU=ON (L48 OR L49 OR L50 OR L51 OR L52 OR L53)
 L55 14 SEA ABB=ON PLU=ON L52 AND (PHARM?/SC,SX)
 L56 31 SEA ABB=ON PLU=ON L48 OR L49 OR L50 OR L51 OR L53 OR L55
 L57 28 SEA ABB=ON PLU=ON L56 AND L41
 SAVE TEMP L57 ZHA338HCA1B/A
 L58 1 SEA ABB=ON PLU=ON (L43 OR L52) AND (L32 OR L33 OR L34 OR L35
 OR L36 OR L37 OR L38 OR L39)
 L59 0 SEA ABB=ON PLU=ON (L24 OR L25 OR L26) AND (L32 OR L33 OR L34
 OR L35 OR L36 OR L37 OR L38 OR L39)
 L60 1 SEA ABB=ON PLU=ON L58 OR L59

L61 383 SEA ABB=ON PLU=ON ((L9 OR L10 OR L11 OR L12) OR L17 OR (L19
OR L20)) AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR L38)
L62 47 SEA ABB=ON PLU=ON L61 AND L39
L63 1 SEA ABB=ON PLU=ON L62 AND ?ACETOPHEN?
L64 1 SEA ABB=ON PLU=ON L60 OR L63
SAVE TEMP L64 ZHA338HCAINV/A

FILE 'STNGUIDE' ENTERED AT 10:48:57 ON 06 DEC 2006

FILE 'USPATFULL, USPAT2' ENTERED AT 10:49:42 ON 06 DEC 2006

L65 46 SEA ABB=ON PLU=ON L6 OR L7
L66 0 SEA ABB=ON PLU=ON L65 AND L29
L67 15 SEA ABB=ON PLU=ON L65 AND (L9 OR L19 OR L20)
L68 15 SEA ABB=ON PLU=ON (L66 OR L67)
L69 14 SEA ABB=ON PLU=ON L68 AND L42
SAVE TEMP L69 ZHA338USP1B/A

FILE 'WPIX' ENTERED AT 10:51:05 ON 06 DEC 2006

SELECT L2 1- DCN
L70 22 SEA ABB=ON PLU=ON (RAED7B/SDCN OR RAED7C/SDCN OR RAED7D/SDCN
OR RAED7E/SDCN OR RAED7F/SDCN OR RAED7H/SDCN OR RAED7I/SDCN OR
RAED7J/SDCN OR RAED7S/SDCN OR RAED7T/SDCN OR RAED7V/SDCN OR
RAED7X/SDCN OR RAED7Y/SDCN OR RAED80/SDCN OR RAED81/SDCN OR
RAED83/SDCN OR RAED84/SDCN OR RAED85/SDCN OR RAOF5T/SDCN OR
RAOG5N/SDCN OR RA3MHC/SDCN OR RA9KNG/SDCN)
D TRI 1-22

FILE 'STNGUIDE' ENTERED AT 10:52:32 ON 06 DEC 2006

D QUE

FILE 'WPIX' ENTERED AT 10:53:05 ON 06 DEC 2006

D L70 IDE 19

FILE 'STNGUIDE' ENTERED AT 10:53:07 ON 06 DEC 2006

FILE 'WPIX' ENTERED AT 10:53:39 ON 06 DEC 2006

L71 1 SEA ABB=ON PLU=ON 665320/DCSE
D TRI
L72 2 SEA ABB=ON PLU=ON RA9KNG/DCN
L73 3 SEA ABB=ON PLU=ON 665320/DCR,DCRE,KW
L74 3 SEA ABB=ON PLU=ON (L72 OR L73)
L75 3 SEA ABB=ON PLU=ON L74 AND L42
D TRI 1-3
L76 3 SEA ABB=ON PLU=ON L75 AND ((L13 OR L14 OR L15 OR L16) OR
(L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28))
L77 1 SEA ABB=ON PLU=ON (L72 OR L73) (P)L31
D KWIC
L78 3 SEA ABB=ON PLU=ON (L75 OR L76 OR L77)

FILE 'STNGUIDE' ENTERED AT 10:59:10 ON 06 DEC 2006

FILE 'WPIX' ENTERED AT 11:05:10 ON 06 DEC 2006

L79 148 SEA ABB=ON PLU=ON (L24 OR L25 OR L26)
L80 3 SEA ABB=ON PLU=ON L79 AND (L29 OR L30 OR L31)
L81 4 SEA ABB=ON PLU=ON L79 AND ((L13 OR L14 OR L15 OR L16) OR
(L21 OR L22 OR L23) OR L28)
L82 6 SEA ABB=ON PLU=ON L78 OR L80 OR L81

L83 6 SEA ABB=ON PLU=ON L82 AND L42
 SAVE TEMP L83 ZHA338WPI1B/A
 D TRI 1-6
 D KWIC 2-3

FILE 'WPIX' ENTERED AT 11:09:41 ON 06 DEC 2006
L84 1 SEA ABB=ON PLU=ON (L74 OR L79) AND (L32 OR L33 OR L34 OR L35
 OR L36 OR L37 OR L38 OR L39)
L85 45 SEA ABB=ON PLU=ON (L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR
 L38) AND (L29 OR L30 OR L31)
L86 38 SEA ABB=ON PLU=ON L85 AND L39
L87 1 SEA ABB=ON PLU=ON L86 AND (?PHENON?/BIX,BIEX,ABEX,TT OR
 ?PHENOL?/BIX,BIEX,ABEX,TT)
L88 22 SEA ABB=ON PLU=ON L86 AND L42
L89 22 SEA ABB=ON PLU=ON L87 OR L88
 SAVE TEMP L89 ZHA338WPIINV/A

FILE 'STNGUIDE' ENTERED AT 11:11:51 ON 06 DEC 2006

FILE 'MEDLINE' ENTERED AT 11:14:01 ON 06 DEC 2006
L90 0 SEA ABB=ON PLU=ON L6 OR L7
L91 48 SEA ABB=ON PLU=ON (L24 OR L25 OR L26)
 E ACETOPHENONE/CT
 E E226+ALL
L92 QUE ABB=ON PLU=ON ACETOPHENONES+PFT,OLD,NEW,NT/CT
 E ANTIOBES/CT
 E E246+ALL
L93 QUE ABB=ON PLU=ON "ANTI-OBESITY AGENTS"+PFT,OLD,NEW,NT/CT
 E ANTIDIABET/CT
 E E260+ALL
L94 QUE ABB=ON PLU=ON "HYPOGLYCEMIC AGENTS"+PFT,OLD,NEW,NT/CT
 E OBESITY/CT
L95 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
 E DIABETES/CT
 E DIABETES MELLITUS/CT
L96 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/CT
L97 60 SEA ABB=ON PLU=ON (L90 OR L91 OR L92) AND ((L93 OR L94 OR
 L95 OR L96) OR (L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR
 L23) OR L28)
L98 0 SEA ABB=ON PLU=ON L97 AND (L32 OR L33 OR L34 OR L35 OR L36
 OR L37 OR L38 OR L39)
L99 35 SEA ABB=ON PLU=ON L97 AND L41
 D TRI 30-35
 SAVE TEMP L99 ZHA338MED1B/A

FILE 'EMBASE' ENTERED AT 11:19:28 ON 06 DEC 2006
L100 0 SEA ABB=ON PLU=ON L6 OR L7
L*** DEL QUE ACETOPHENONE DERIV/CT
 E ACETOPHENONE DERIV/CT
 E E309+ALL
L101 QUE ABB=ON PLU=ON "ACETOPHENONE DERIVATIVE"+PFT,OLD,NEW,NT/CT
L102 812 SEA ABB=ON PLU=ON L100 OR L101 OR (L24 OR L25 OR L26)
 E ANTIDIABETIC AGENT/CT
L103 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENT"+PFT,OLD,NEW,NT/CT
 E DIABETES/CT
 E E336+ALL

L104 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/CT
 E ANTIOBESITY/CT
 L105 QUE ABB=ON PLU=ON "ANTIOBESITY AGENT"+PFT,OLD,NEW,NT/CT
 E OBESITY/CT
 L106 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
 L107 9 SEA ABB=ON PLU=ON L102 AND ((L103 OR L104 OR L105 OR L106)
 OR (L13 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)
 L*** DEL 7 S L107 AND L42
 L108 7 SEA ABB=ON PLU=ON L107 AND L41
 SAVE TEMP L108 ZHA338EMB1B/A
 L109 720 SEA ABB=ON PLU=ON (L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR
 L38 OR L39) AND ((L103 OR L104 OR L105 OR L106) OR (L13 OR L14
 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)
 L110 0 SEA ABB=ON PLU=ON L109 AND L102

FILE 'STNGUIDE' ENTERED AT 11:24:09 ON 06 DEC 2006

FILE 'BIOSIS, CABA, BIOTECHNO, DRUGU, VETU' ENTERED AT 11:24:41 ON 06 DEC 2006

L111 0 SEA ABB=ON PLU=ON L6 OR L7
 L112 142 SEA ABB=ON PLU=ON (L24 OR L25 OR L26)
 L113 142 SEA ABB=ON PLU=ON L111 OR L112
 L114 142 SEA ABB=ON PLU=ON L113 AND ((L13 OR L14 OR L15 OR L16) OR
 (L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28))
 L115 142 SEA ABB=ON PLU=ON L113 AND ((L13 OR L14 OR L15 OR L16) OR
 (L21 OR L22 OR L23 OR L24 OR L25 OR L26) OR L28)
 L116 67 SEA ABB=ON PLU=ON L113 AND ((L13 OR L14 OR L15 OR L16) OR
 (L21 OR L22 OR L23) OR L28 OR L27)
 L117 64 SEA ABB=ON PLU=ON L116 AND L41
 L118 0 SEA ABB=ON PLU=ON L117 AND ((L13 OR L14 OR L15 OR L16) OR
 (L21 OR L22 OR L23) OR L28)
 D QUE
 L119 250 SEA ABB=ON PLU=ON ?ACETOPHEN?(15A)((L13 OR L14 OR L15 OR
 L16) OR (L21 OR L22 OR L23) OR L28 OR L27)
 L120 8 SEA ABB=ON PLU=ON ?ACETOPHEN?(15A)((L13 OR L14 OR L15 OR
 L16) OR (L21 OR L22 OR L23) OR L28)
 L121 8 SEA ABB=ON PLU=ON L119 AND L120
 L122 7 SEA ABB=ON PLU=ON L121 AND L41
 SAVE TEMP L122 ZHA338MULSB/A
 D SCAN
 L123 0 SEA ABB=ON PLU=ON L119 AND (L32 OR L33 OR L34 OR L35 OR L36
 OR L37 OR L38 OR L39)

FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, JICST-EPLUS, JAPIO, LIFESCI,
 BIOENG, CABA, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH,
 CONFSCI, DISSABS' ENTERED AT 11:41:58 ON 06 DEC 2006

L124 896 SEA ABB=ON PLU=ON (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A)((L1
 3 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28 OR L27)
 L125 38 SEA ABB=ON PLU=ON (L24 OR L25 OR L26 OR ?ACETOPHEN?) (15A)((L1
 3 OR L14 OR L15 OR L16) OR (L21 OR L22 OR L23) OR L28)
 L126 38 SEA ABB=ON PLU=ON L124 AND L125
 L127 0 SEA ABB=ON PLU=ON L124 AND (L32 OR L33 OR L34 OR L35 OR L36
 OR L37 OR L38 OR L39)
 L128 0 SEA ABB=ON PLU=ON L124 AND L40
 L129 36 SEA ABB=ON PLU=ON L126 AND L41
 SAVE TEMP L129 ZHA338MUL1B/A
 D QUE L57

18 Zhang 10/699,338 12/06/2006

D QUE L69
D QUE L83
D QUE L99
D QUE L108
D QUE L122
D QUE L129

FILE 'HCAPLUS, USPATFULL, USPAT2, WPIX, MEDLINE, EMBASE, BIOSIS, DRUGU, PASCAL, JAPIO, LIFESCI, DRUGB, SCISEARCH, DISSABS' ENTERED AT 12:10:59 ON 06 DEC 2006

L130 101 DUP REM L57 L69 L83 L99 L108 L122 L129 (32 DUPLICATES REMOVED)
ANSWERS '1-28' FROM FILE HCAPLUS
ANSWERS '29-35' FROM FILE USPATFULL
ANSWERS '36-40' FROM FILE WPIX
ANSWERS '41-78' FROM FILE MEDLINE
ANSWERS '79-84' FROM FILE EMBASE
ANSWERS '85-88' FROM FILE BIOSIS
ANSWERS '89-90' FROM FILE JAPIO
ANSWERS '91-100' FROM FILE DRUGB
ANSWER '101' FROM FILE DISSABS

FILE 'STNGUIDE' ENTERED AT 12:11:21 ON 06 DEC 2006

FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' ENTERED AT 12:11:58 ON 06 DEC 2006
D IBIB ED AB HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 12:12:00 ON 06 DEC 2006

FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' ENTERED AT 12:12:12 ON 06 DEC 2006
D IBIB ED AB HITIND HITSTR 2-28

FILE 'STNGUIDE' ENTERED AT 12:12:37 ON 06 DEC 2006

FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' ENTERED AT 12:19:13 ON 06 DEC 2006
D IBIB AB HITIND HITSTR 29-35

FILE 'STNGUIDE' ENTERED AT 12:20:19 ON 06 DEC 2006

FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' ENTERED AT 12:22:20 ON 06 DEC 2006
D 36-40 IALL ABEQ TECH ABEX

FILE 'STNGUIDE' ENTERED AT 12:22:26 ON 06 DEC 2006

FILE 'HCAPLUS, USPATFULL, WPIX, MEDLINE, EMBASE, BIOSIS, JAPIO, DRUGB, DISSABS' ENTERED AT 12:22:54 ON 06 DEC 2006
D IBIB ED AB IND 41-101

FILE 'STNGUIDE' ENTERED AT 12:23:05 ON 06 DEC 2006

D QUE L64
D QUE L89
D QUE L98
D QUE L110
D QUE L123

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D QUE L127
D QUE L128

FILE 'HCAPLUS, WPIX' ENTERED AT 12:25:42 ON 06 DEC 2006
L131 22 DUP REM L64 L89 L98 L110 L123 L127 L128 (1 DUPLICATE REMOVED)
ANSWER '1' FROM FILE HCAPLUS
ANSWERS '2-22' FROM FILE WPIX

FILE 'STNGUIDE' ENTERED AT 12:25:48 ON 06 DEC 2006

FILE 'HCAPLUS, WPIX' ENTERED AT 12:25:57 ON 06 DEC 2006
D IBIB ED AB 1-22

FILE 'STNGUIDE' ENTERED AT 12:26:06 ON 06 DEC 2006

FILE HOME

FILE ZCAPLUS

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FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)

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FILE HCAPLUS

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FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)

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FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 1, 2006 (20061201/UP).

FILE WPIX

FILE LAST UPDATED: 4 DEC 2006 <20061204/UP>

MOST RECENT THOMSON SCIENTIFIC UPDATE: 200678 <200678/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
PLEASE VISIT:[<<<](http://www.stn-international.de/stndatabases/details/dwpi_r.html)FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:[<<<](http://www.stn-international.de/training_center/patents/stn_guide.pdf)

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE

<http://scientific.thomson.com/support/patents/coverage/latestupdates/>

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE

http://www.stn-international.de/stndatabases/details/ ipc_reform.html and<http://scientific.thomson.com/media/scpdf/ ipcrdwpi.pdf>>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX
PLEASE SEE[<<<](http://www.stn-international.de/stndatabases/details/dwpi_r.html)

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FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 5 DEC 2006 HIGHEST RN 914910-45-5

DICTIONARY FILE UPDATES: 5 DEC 2006 HIGHEST RN 914910-45-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:<http://www.cas.org/ONLINE/UG/regprops.html>

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 5 Dec 2006 (20061205/PD)
FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)
HIGHEST GRANTED PATENT NUMBER: US7146645
HIGHEST APPLICATION PUBLICATION NUMBER: US2006272066
CA INDEXING IS CURRENT THROUGH 5 Dec 2006 (20061205/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 5 Dec 2006 (20061205/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 5 Dec 2006 (20061205/PD)
FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)
HIGHEST GRANTED PATENT NUMBER: US2006250466
HIGHEST APPLICATION PUBLICATION NUMBER: US2006269403
CA INDEXING IS CURRENT THROUGH 5 Dec 2006 (20061205/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 5 Dec 2006 (20061205/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

FILE MEDLINE

FILE LAST UPDATED: 5 Dec 2006 (20061205/UP). FILE COVERS 1950 TO DATE.

In preparation for the annual MEDLINE reload, the National Library of Medicine (NLM) has suspended delivery of regular updates as of November 15, 2006. In-process and in-data-review records will resume delivery on November 21, 2006, and will continue to be added to MEDLINE until December 17, 2006.

On December 17, 2006, all regular MEDLINE updates from November 15 to December 16 will be added to MEDLINE, along with 2007 Medical Subject Headings (MeSH(R)) and 2007 tree numbers.

The annual reload will be available in early 2007.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE EMBASE

FILE COVERS 1974 TO 6 Dec 2006 (20061206/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

8 Zhang 10/699/338: 12/06/2006

RECORDS LAST ADDED: 29 November 2006 (20061129/ED)

FILE CABA

FILE COVERS 1973 TO 3 Nov 2006 (20061103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

FILE BIOTECHNO

FILE LAST UPDATED: 7 JAN 2004 <20040107/UP>

FILE COVERS 1980 TO 2003.

>>> BIOTECHNO IS NO LONGER BEING UPDATED AS OF 2004 <<<

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN /CT AND BASIC INDEX <<<

FILE DRUGU

FILE LAST UPDATED: 27 NOV 2006 <20061127/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE VETU

FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>

FILE COVERS 1983-2001

FILE PASCAL

FILE LAST UPDATED: 4 DEC 2006 <20061204/UP>

FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <<<

FILE JICST-EPLUS

FILE COVERS 1985 TO 4 DEC 2006 (20061204/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE JAPIO

FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>

FILE COVERS APRIL 1973 TO JULY 27, 2006

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN FILE JAPIO.
SEE HELP CHANGE

AND

http://www.stn-international.de/stndatabases/details/ipc_reform.html <<<

FILE LIFESCI

FILE COVERS 1978 TO 10 Nov 2006 (20061110/ED)

FILE BIOENG

FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>
FILE COVERS 1982 TO DATE

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN
THE BASIC INDEX <<<

FILE BIOTECHDS

FILE LAST UPDATED: 6 DEC 2006 <20061206/UP>
FILE COVERS 1982 TO DATE

>>> USE OF THIS FILE IS LIMITED TO BIOTECH SUBSCRIBERS <<<

FILE DRUGB

>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE VETB

FILE LAST UPDATED: 25 SEP 94 <940925/UP>
FILE COVERS 1968-1982

FILE SCISEARCH

FILE COVERS 1974 TO 30 Nov 2006 (20061130/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE CONFSCI

FILE COVERS 1973 TO 14 Nov 2006 (20061114/ED)

CSA has resumed updates, see NEWS FILE

FILE DISSABS

FILE COVERS 1861 TO 27 NOV 2006 (20061127/ED)

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=> => d que stat

L1 2 SEA FILE=HCAPLUS ABB=ON PLU=ON US2003-699338/APPS
L3 TRANSFER PLU=ON L1 1- RN : 334 TERMS
L4 334 SEA FILE=REGISTRY ABB=ON PLU=ON L3
L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L4 AND ?ACETOPHENON?/CNS
L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND "C8 H7 N O4"/MF
L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON 6322-56-1/RN,CRN
L8 QUE ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP" OR "63
22-56-1D"
L9 QUE ABB=ON PLU=ON "ANTIDIABETIC AGENTS"+PFT,OLD,NEW/CT
L10 QUE ABB=ON PLU=ON HYPERGLYCEMIA+PFT,OLD,NEW,RT/CT
L11 QUE ABB=ON PLU=ON "DIABETES MELLITUS"+PFT,OLD,NEW,NT/C

T
L12 QUE ABB=ON PLU=ON "DIABETES INSIPIDUS"+PFT,OLD,NEW,NT/
CT
L13 QUE ABB=ON PLU=ON ?DIABET? OR ?HYPERGLYCEM? OR ?HYPERGLYCEAM?
OR ?HYPERGLYCAEM? OR ?GLUCEM? OR ?GLYCEM? OR ?GLYCEAM?
OR ?GLYCAEM?
L14 QUE ABB=ON PLU=ON (HYPER(W) (GLYCEM? OR GLUCEM? OR GLYCEAM?
OR GLYCAEM?)) OR HYPERGLUCEM? OR HYPERGLUCEAM? OR HYPERGLUCAEM?
L15 QUE ABB=ON PLU=ON ANTIDIABET? OR (ANTIHYPER(W) (GLYCEM?
OR GLUCEM? OR GLYCEAM? OR GLYCAEM?)) OR ANTIHYPERGLUC? O
R ANTIHYPERGLYCEM? OR ANTIHYPERGLYCEAM? OR ANTIHYPERGLYCA
EM?
L16 QUE ABB=ON PLU=ON HYPOGLYCEM? OR HYPOGLYCEAM? OR HYPOGLYCAEM?
OR HYPOGLUCEM? OR HYPOGLUCEAM? OR HYPOGLUCAEM? OR
(HYPO(W) (GLYCEM? OR GLYCEAM? OR GLYCAEM? OR GLUCEM? OR GLUCEAM?
OR GLUCAEM?))
L17 QUE ABB=ON PLU=ON OBESITY+PFT,OLD,NEW,NT/CT
L18 QUE ABB=ON PLU=ON ANTIOBESITY AGENTS/CT
L19 QUE ABB=ON PLU=ON "APPETITE DEPRESSANTS"+PFT,OLD,NEW,N
T/CT
L20 QUE ABB=ON PLU=ON "ANTI OBESITY AGENTS"+PFT,OLD,NEW,NT/
CT
L21 QUE ABB=ON PLU=ON OBESE OR OBESITY OR ADIPOSITY OR COR
PULENCE OR CORPULENC?
L22 QUE ABB=ON PLU=ON ANTIOBESIT? OR ANTIADIPOSITY? OR ANT
ICORPULENC? OR ANTICORPULENT?
L23 QUE ABB=ON PLU=ON CORPULENT
L24 QUE ABB=ON PLU=ON (?ACETOPHENON? (3A) ?NITRO?) (5A) ?HYDRO
X?
L25 QUE ABB=ON PLU=ON ((?PHENOL? (3A) (ACETO? OR ACETYL?)) (5A)
?NITRO?
L26 QUE ABB=ON PLU=ON (NSC(W) 32113) OR NSC32113
L27 QUE ABB=ON PLU=ON ?PHARM? OR ?MEDIC? OR ?TREAT? OR ?TH
ERAP? OR REMED? OR ALLEVIAT?
L28 QUE ABB=ON PLU=ON ANORECTIC
L41 QUE ABB=ON PLU=ON AY<2003 OR PY<2003 OR PRY<2003 OR MY
<2003 OR REVIEW/DT
L43 158 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR L7
L44 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND ((L9 OR L10 OR L11 OR
L12) OR L17 OR L18 OR L19 OR L20)
L45 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L43(L) (THU OR PKT OR PAC OR
DMA OR BAC)/RL
L46 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 (L) L27
L47 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 (L) ((L13 OR L14 OR L15
OR L16) OR (L21 OR L22 OR L23) OR L28)
L48 20 SEA FILE=HCAPLUS ABB=ON PLU=ON (L44 OR L45 OR L46 OR L47)
L49 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 AND (L9 OR L10 OR L11 OR
L12 OR L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR
L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28)
L50 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L8(L) (THU OR PKT OR PAC OR
DMA OR BAC)/RL
L51 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L8(L) ((L13 OR L14 OR L15 OR
L16) OR (L21 OR L22 OR L23) OR L28 OR L27)
L52 51 SEA FILE=HCAPLUS ABB=ON PLU=ON "6322-56-1P" OR "6322-56-1DP"
OR "6322-56-1D"
L53 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND ((L9 OR L10 OR L11 OR

Zhang 10/699,338-

12/06/2006

L12) OR L17 OR (L19 OR L20))
L55 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (PHARM?/SC,SX)
L56 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 OR L49 OR L50 OR L51 OR
L53 OR L55
L57 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 AND L41
L132 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 NOT L57
L133 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L132 AND (L6 OR L7)

=> => d his ful l132-l133

(FILE 'HCAPLUS, WPIX' ENTERED AT 12:25:42 ON 06 DEC 2006)
ANSWER '1' FROM FILE HCAPLUS
ANSWERS '2-22' FROM FILE WPIX

FILE 'STNGUIDE' ENTERED AT 12:25:48 ON 06 DEC 2006

FILE 'HCAPLUS, WPIX' ENTERED AT 12:25:57 ON 06 DEC 2006
D IBIB ED AB 1-22

FILE 'STNGUIDE' ENTERED AT 12:26:06 ON 06 DEC 2006

FILE 'HCAPLUS' ENTERED AT 12:27:14 ON 06 DEC 2006
L132 1 SEA ABB=ON PLU=ON L1 NOT L57
D SCAN
L133 0 SEA ABB=ON PLU=ON L132 AND (L6 OR L7)

FILE 'STNGUIDE' ENTERED AT 12:28:00 ON 06 DEC 2006
D QUE STAT

FILE HOME

FILE ZCAPLUS

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FILE COVERS 1907 - 6 Dec 2006 VOL 145 ISS 24
FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE HCAPLUS

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FILE STNGUIDE
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 1, 2006 (20061201/UP).

FILE WPIX
FILE LAST UPDATED: 4 DEC 2006 <20061204/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200678 <200678/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 5 Dec 2006 (20061205/PD)

FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)

HIGHEST GRANTED PATENT NUMBER: US7146645

HIGHEST APPLICATION PUBLICATION NUMBER: US2006272066

CA INDEXING IS CURRENT THROUGH 5 Dec 2006 (20061205/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 5 Dec 2006 (20061205/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 5 Dec 2006 (20061205/PD)

FILE LAST UPDATED: 5 Dec 2006 (20061205/ED)

HIGHEST GRANTED PATENT NUMBER: US2006250466

HIGHEST APPLICATION PUBLICATION NUMBER: US2006269403

CA INDEXING IS CURRENT THROUGH 5 Dec 2006 (20061205/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 5 Dec 2006 (20061205/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

FILE MEDLINE

FILE LAST UPDATED: 5 Dec 2006 (20061205/UP). FILE COVERS 1950 TO DATE.

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CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT FROM JANUARY 1969 TO DATE.

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FILE COVERS 1973 TO 3 Nov 2006 (20061103/ED)

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FILE COVERS 1980 TO 2003.

>>> BIOTECHNO IS NO LONGER BEING UPDATED AS OF 2004 <<<

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN /CT AND BASIC INDEX <<<

FILE DRUGU

FILE LAST UPDATED: 27 NOV 2006 <20061127/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE VETU

FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>

FILE COVERS 1983-2001

FILE PASCAL

FILE LAST UPDATED: 4 DEC 2006 <20061204/UP>

FILE COVERS 1977 TO DATE.

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FILE JICST-EPLUS

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THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE JAPIO
FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>
FILE COVERS APRIL 1973 TO JULY 27, 2006

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN FILE JAPIO.
SEE HELP CHANGE
AND
[<<<](http://www.stn-international.de/stndatabases/details/ipc_reform.html)

FILE LIFESCI
FILE COVERS 1978 TO 10 Nov 2006 (20061110/ED)

FILE BIOENG
FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>
FILE COVERS 1982 TO DATE

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN
THE BASIC INDEX <<<

FILE BIOTECHDS
FILE LAST UPDATED: 6 DEC 2006 <20061206/UP>
FILE COVERS 1982 TO DATE

>>> USE OF THIS FILE IS LIMITED TO BIOTECH SUBSCRIBERS <<<

FILE DRUGB
>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE VETB
FILE LAST UPDATED: 25 SEP 94 <940925/UP>
FILE COVERS 1968-1982

FILE SCISEARCH

FILE COVERS 1974 TO 30 Nov 2006 (20061130/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

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FILE DISSABS
FILE COVERS 1861 TO 27 NOV 2006 (20061127/ED)

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